UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-K

| [X] ANNUAL REPORT PURSUANT TO SECURITIES EXCHANGE ACT FOR THE FISCAL YEAR ENDED O | C OF 1934 DECEMBER 31, 2001 |
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| [] TRANSITION REPORT PURSUANT SECURITIES EXCHANGE ACT | T TO SECTION 13 OR 15(d)OF THE |
| COMMISSION FIL | JE NO. 0-15443 |
| THERAGENICS (Exact name of registrant | CORPORATION® as specified in its charter) |
| Delaware (State of incorporation) | 58-1528626 (I.R.S. Employer Identification Number) |
| 5203 Bristol Industrial Way Buford, Georgia (Address of principal executive o | 30518 |
| Registrant's telephone number, 0233 | including area code:(770) 271- |
| Securities registered pursuant | to Section 12(b) of the Act: |
| Title of each class | Name of each exchange or which registered |
| Common stock, \$.01 par value, Together with associated Common Stock Purchase Rights | New York Stock Exchange |
| | |

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES X NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive Proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this form 10-K. (X)

As of March 14, 2001 the aggregate market value of the common stock of the registrant held by non-affiliates of the registrant, as determined by reference to the closing price of the Common Stock as reported on the New York Stock Exchange, was \$257,648,580.

As of March 14, 2001 the number of shares of Common Stock, \$.01 par value, outstanding was 29,445,552.

Documents incorporated by reference: Proxy Statement for the registrant's 2002 Annual Meeting of Stockholders, to be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2001, is incorporated by reference in Part III herein.

Part I

Item 1. BUSINESS

General

Theragenics Corporation® ("TheragenicsTM" or the "Company"), incorporated under Delaware law in 1981, is the manufacturer of TheraSeed®, a rice-sized FDA-cleared device used primarily in treating localized prostate cancer with a one-time, minimally invasive procedure. TheragenicsTM is the world's leading producer of palladium-103 (Pd-103), the radioactive isotope that supplies the therapeutic radiation for its TheraSeed® implant. TheragenicsTM is also involved in research and development utilizing Pd-103 for the treatment of restenosis, macular degeneration and other diseases, and has research and development programs involving other isotopes and their uses. Physicians, hospitals and other healthcare providers, primarily located in the United States, utilize the TheraSeed® product.

From May 1997 to August 2000, substantially all TheraSeed® implants for the treatment of prostate cancer were sold through an exclusive distributor. Notice of termination of that exclusive distribution agreement was received in August 2000 ending TheragenicTM contractual requirement to use an exclusive distributor. The contract was subsequently terminated in January 2001. The Company currently sells its TheraSeed® implants directly to physicians and non-exclusive third party distributors.

The Company has an active and ongoing program targeted at diversifying its future revenue stream. As part of this program the Company constructed a facility in the Oak Ridge, Tennessee area to house the equipment, infrastructure and work force necessary to support the production of isotopes, including Pd-103, using unique plasma separation process (PSP) technology being leased from the U.S. Department of Energy (DOE). PSP technology is a method of separating relatively large quantities of a specific isotope from a specific element. In the past this technology had demonstrated the ability to produce material for the U.S. Government to support nuclear power generation. It was also utilized by TheragenicsTM to produce Pd-102 for conversion to Pd-103. In addition to possibly increasing its capacity and allowing for expanded use of Pd-103, the Company also believes that the DOE technology may allow it to produce other isotopically engineered materials for use in medical and non-medical applications.

Research and development initiatives are also underway to support the Company's diversification program. Certain pre-clinical animal studies addressing the use of Pd-103 for the prevention of restenosis in coronary artery disease are underway. Restenosis is the renarrowing of blood vessels following procedures that are done to open stenosed (blocked) blood vessels. The use of Pd-103 for the treatment of age-related macular degeneration, a disease that leads to loss of eyesight and in some cases complete blindness, is also being studied, with pre-clinical animal trials expected to begin in 2002.

The Company is also searching for, reviewing and evaluating external opportunities for diversification such as partnering and/or acquiring technologies, products or companies.

In 1998 the Company received regulatory approval for the marketing of TheraSeed® throughout the member countries of the European Union by obtaining CE Marking. Sales of TheraSeed® in Europe were not significant in any of the three years in the period ended December 31, 2001.

Industry Overview

Prostate Cancer

Excluding skin cancer, prostate cancer is the most common form of cancer, and the second leading cause of cancer deaths, in men. It is most common in North America and northwestern Europe and less common in Asia, Africa, Central America, and South America. The American Cancer Society estimates there will be about 189,000 new cases of prostate cancer diagnosed and an estimated 30,200 deaths associated with the disease in the United States during 2002.

Prostate cancer incidence and mortality increase with age. Prostate cancer is found most often in men who are over the age of 50. More than seven out of ten men diagnosed with prostate cancer are over the age of 65. At the age of 70, the chance of having prostate cancer is 12 times greater than at age 50. According to the American Cancer Society, prostate cancer incidence rates increased between 1988 and 1992 due to earlier diagnosis in men who otherwise had no sign of symptoms. Consequently, early screening has fostered a decline in the prostate cancer death rate since 1990.

Weak or interrupted urine flow, an inability to urinate, frequent urination and pain during urination can all be signs of prostate cancer. Additional symptoms can include blood in the urine, continual lower back pain or pain in the pelvis or pain in the upper thighs. However, it should be noted that these symptoms are nonspecific and can be caused from non-malignant conditions.

According to the American Cancer Society, approximately 83% of all prostate cancers are found while they are still localized (confined to the prostate), and a 5-year relative survival rate for men with localized prostate cancer is 100%. According to the American Cancer Society, the survival rate for all stages of prostate cancer combined has increased from 67% to 96% over the past 20 years. Longer follow-up suggests the relative survival continues to increase after a diagnosis. Recent data indicates that the relative 10-year survival is 75%, and 15-year survival rate is 54%.

In addition to age, other risk factors are linked to prostate cancer, such as genetics. Men who have relatives that have been affected, especially if the relatives were young at diagnosis, have an even higher risk of contracting the disease. Researchers have discovered changes in certain genes, influenced by DNA mutations inherited from a parent, may cause some men to be more inclined to develop prostate cancer. It has also been suggested that environmental factors such as exposure to cancer-causing chemicals or radiation may cause DNA mutations in many organs, but this theory has not been confirmed.

Another factor that may contribute to prostate cancer is diet. A diet high in fat may play a part in causing prostate cancer. The American Cancer Society suggests that *Lycopenes*, found in vegetables and certain fruits such as tomatoes, grapefruit, and watermelon, and the mineral *selenium* found in fish, meat, poultry, cereals and vegetables such as mushrooms and asparagus, seem to lower prostate cancer risk. An increase in prostate cancer may also be related to a diet high in calcium and low in fructose (fruit sugar).

The prostate is a walnut-sized gland surrounding the male urethra, located below the bladder and adjacent to the rectum. The two most prevalent prostate diseases are benign prostatic hyperplasia ("BPH") and prostate cancer. BPH is a non-cancerous enlargement of the innermost part of the prostate. Prostate cancer is a malignant tumor that begins most often in the periphery of the gland and, like other forms of cancer, may spread beyond the prostate to other parts of the body. If left untreated, prostate cancer can metastasize to the lung or bone, resulting in death.

The American Cancer Society recommends that men without symptoms, risk factors and a life expectancy of at least ten years should begin regular annual medical exams at the age of 50, and believes

that health care providers should offer as part of the exam the prostate-specific antigen (PSA) blood test and a digital rectal examination (DRE). The PSA blood test determines the amount of prostate specific antigen present in the blood. PSA is found in a protein secreted by the prostate, and elevated levels of PSA can be associated with either prostatitis (a noncancerous inflammatory condition) or a proliferation of cancer cells in the prostate. Industry studies have shown that the PSA test can detect prostate cancer as many as five years earlier than the digital rectal exam. Transrectal ultrasound tests and biopsies are typically performed on patients with elevated PSA readings to confirm the existence of cancer.

A tumor found by a prostate biopsy is usually assigned a grade by a pathologist. The most common prostate cancer grading system is called the *Gleason* grading system. A Gleason score, which ranges from 2 to 10, usually is used to estimate the tumor's growth rate. The lower the score, the slower the cancer grows. Most localized cancers of the prostate gland are an intermediate scores ranging from Gleason grades 4, 5 or 6.

Staging is the process of determining how far the cancer has spread. The treatment and recovery outlook depend on the stage of the cancer. The TNM system is the staging process used most often. The TNM descriptions can be grouped together with stages labeled 0 through IV (0-4). The higher the number, the more the cancer has spread. The following table summarizes the various stages of prostate cancer.

StagesCharacteristics of prostate cancerT1 or T2Localized in the prostateT3 or T4Locally advancedN+ or M+Spread to pelvic lymph nodes (N+)or distant organs (M+)

Treatment Options

In addition to seeding, localized prostate cancer is most commonly treated with radical prostatectomy (RP), external beam radiation therapy (EBRT), cryosurgery, hormone therapy, and watchful waiting. Some of these therapies may be combined in special cases to address a specific cancer stage or patient need. For example, TheraSeed® has been used in combination with EBRT to treat some locally advanced cases of prostate cancer. The treatments that have been most successful are those that remove or kill all of the cancerous tissue while avoiding excessive damage to the surrounding healthy tissue. When the cancerous tissue is not completely eliminated, the cancer typically returns to the primary site, often with metastases to other areas. The following is a summary of treatment options for prostate cancer other than seeding.

Radical Prostatectomy is the most common surgical procedures. Radical Prostatectomy involves the complete removal of the prostate gland and has been used for over 30 years in treating early-stage, localized tumors. RP typically requires a three-day average hospital stay and a lengthy recovery period (generally three to five weeks). Possible side effects include impotence and incontinence. The cost of RP ranges from \$19,000 to \$25,000 per procedure, excluding treatment for side effects and postoperative complications.

External Beam Radiation Therapy involves directing a beam of radiation at the prostate gland from outside the body to destroy tumorous tissue and has been a common technique for treating many kinds of cancer since the 1950s. EBRT has typically been reserved for early-stage prostate cancer in locally advanced cases where the patient is an inappropriate surgical risk. Patients are usually treated five days per week in an outpatient center over a period of six to seven weeks. Rectal complications resulting from damage to the rectal wall caused by the radiation beam as it travels to the prostate are the most common side effects. Other possible side effects include incontinence and impotence, but these side effects generally occur with less frequency than they do following RP. EBRT is estimated to cost between

Cryosurgery involves placing a small metal tool into the tumor and killing the cancer by freezing the entire prostate. Patients usually remain in the hospital for one to two days. There will be some bruising and soreness of the area where the probe was inserted. Side effects of cryosurgery may include damage to nerves near the prostate that may cause impotence and incontinence, damage to bladder and intestines, and a fistula (an abnormal opening) between the rectum and bladder. This option is considered most appropriate for men with serious medical conditions that make them unable to endure surgery or radiation therapy.

Ancillary Therapies, primarily consisting of hormone therapy and chemotherapy, are used to slow the growth of cancer and reduce tumor size, but are generally not intended to be curative. Ancillary therapies are often used during advanced stages of the disease to extend life and relieve symptoms. Side effects of hormonal drug therapy include increased development of breasts, impotence and decreased libido. In addition, many hormone pharmaceuticals artificially lower PSA levels in patients, which can interfere with staging the disease and monitoring its progress. Side effects of chemotherapy include nausea, hair loss and fatigue. Drug therapy and chemotherapy require long-term, repeated administration of medication on an outpatient basis.

Watchful Waiting is recommended by some physicians in certain circumstances based on the severity and growth rate of the disease, as well as on the age and life expectancy of the patient. The aim of watchful waiting is to monitor the patient, treat some of the attendant symptoms and determine when more active intervention is required. Watchful waiting has gained popularity among those patients refusing treatment due to side effects associated with radical prostatectomy. Watchful waiting requires periodic physician visits and PSA monitoring.

A trial study with 18,000 men enrolled is currently underway to determine the efficacy of the drug called finasteride, which prevents the prostate from using male hormones. The drug inhibits male hormones called androgens that are known to be important in the growth of normal and cancerous prostate cells and may be important in the promotion of prostate cancer. It will take several years, however, before the results of the study are known due to the fact that prostate cancers form slowly.

In addition to the treatment options described above, other forms of treatment as well as prevention are being developed and tested in clinical settings.

The Theragenics TM Solution

Theragenics produces TheraSeed®, an FDA-cleared device for treatment of all solid localized tumors and currently used principally for the treatment of prostate cancer. In the prostate application, TheraSeed® devices are implanted throughout the prostate gland in a minimally invasive surgical technique under ultrasound guidance. The radiation emitted by the seeds is contained within the immediate prostate area, killing the tumor while sparing surrounding organs of significant radiation exposure. The seeds, whose capsules are biocompatible, remain in the prostate after delivering their radiation dose. TheraSeed® is best suited for solid localized tumors and is typically classified as a treatment for early-stage disease.

Management believes TheraSeed® offers significant advantages over RP and EBRT. Recent multi-year clinical studies indicate that seeding offers success rates for early-stage prostate cancer that are comparable to or better than those of RP or EBRT and is associated with reduced complication rates. In addition, the TheraSeed® treatment is a one-time outpatient procedure with a typical two to three day recovery period. By comparison, RP is an inpatient procedure typically accompanied by an average three day hospital stay and a three to five week recovery period, and EBRT involves six to seven weeks of daily radiation treatments. The Company estimates that treatment with TheraSeed® generally costs \$13,000 to

\$17,000 per procedure, which is lower than the cost of RP and comparable to the cost of EBRT.

TheraSeed® is a radioactive "seed" approximately 4.5 millimeters long and 0.8 millimeters in diameter, or roughly the size of a grain of rice. Each seed consists of biocompatible titanium that encapsulates the radioactive substance Pd-103. The half-life of Pd-103, or the time required to reduce the emitted radiation to one-half of its initial level, is 17 days. The half-life characteristics result in the loss of almost all radioactivity in less than four months.

Treatment Protocol

Prostate cancer patients electing seed therapy, first undergo a transrectal ultrasound test or CT scan, which generates a two-dimensional image of the prostate. With the assistance of a computer program, a three dimensional treatment plan is created that calculates the number and placement of the seeds required for the best possible distribution of radiation to the prostate.

Once the implant model has been constructed, the procedure is scheduled and the seeds are ordered. The number of seeds implanted normally ranges from 40 to 100, with the number of seeds varying with the size of the prostate. The procedure is usually performed under local anesthesia in an outpatient setting. An ultrasound probe is first positioned in the rectum to guide needle placement and seed location. Correct needle placement is facilitated by a template, or grid, that covers the perineum (the area between the scrotum and rectum through which the needles are inserted). This template is attached to the ultrasound probe. Implant needles loaded with seeds are assigned to the appropriate template holes as indicated in the treatment plan. Each needle is guided through the template and then through the perineum to its predetermined position within the prostate under direct ultrasound visualization. The seeds are implanted as the needle is withdrawn from the prostate. When all seeds have been inserted, the ultrasound image is again reviewed to verify seed placement. An experienced practitioner typically performs the procedure in approximately 60 to 90 minutes, with the patient often returning home at day's end.

Seeding has been used as a treatment for prostate cancer for more than 20 year. Twenty years ago, when seeds containing the radioactive isotope Iodine-125 (I-125) were implanted in prostate tumors under open surgery. However, this technique fell into disfavor because the seeds were often haphazardly arranged resulting in radiation not reaching all of the targeted cancerous prostate. Compounding this was that often an unintended radiation dose was delivered to healthy surrounding tissues, particularly the urethra and rectum. Clinical results indicate that the computer modeling, advanced imaging and other techniques used in seeding today have significantly ameliorated these drawbacks.

Clinical Results

Strong Efficacy Results. Clinical data indicates that seeding offers success rates for early-stage prostate cancer treatment that are comparable to or better than those of RP or EBRT. The vast majority of published studies on the use of seeding in the treatment of early-stage prostate cancer have been very positive. A nine-year clinical study published in the March 2000 issue of International Journal of Radiation Oncology, Biology and Physics, reported that 83.5% of the patients treated with TheraSeed® were cancer-free at nine years. The study was conducted by Dr. John Blasko of the Seattle Prostate Institute and included 230 patients with clinical stage T1 and T2 prostate cancer. Only 3% experienced cancer recurrence in the prostate. Because of Dr. Blasko's extensive experience in the treatment of cancer and brachytherapy, the Company retained him as a medical and cancer advisor in 1998.

Seeding treatment in combination with EBRT has also recorded impressive results in the treatment of higher risk prostate cancer patients. In their paper published for the *Seminars in Surgical Oncology 1997*, Drs. Blasko, Ragde, Grimm, et al. presented an eight-year actuarial local and distal

disease-free rate of 91% and 83%, respectively for 231 patients who were considered to represent higher risks of locally advanced prostate cancer and were treated with a combination of Pd-103 or I-125 seeding and a modified dose of EBRT. A study by Dr. Michael Dattoli of University Community Hospital, Tampa, Florida, and Dr. Kent Wallner of Memorial Sloan-Kettering Cancer Center, New York, New York, published in the *International Journal of Radiation Oncology, Biology and Physics* in July 1996, found a three-year actuarial freedom from biochemical failure (based on PSA scores) of 79% among 73 patients with clinically localized, high risk prostate cancer who were treated with EBRT in combination with Pd-103. This compares favorably to results reported for patients treated with conventional dose EBRT alone. These locally advanced cases are significant because typical RP protocols would not classify them as suitable for surgical treatment.

Reduced Incidence of Side Effects. Because TheraSeed® delivers a highly concentrated and confined dose of radiation directly to the prostate, healthy surrounding tissues and organs are spared excessive radiation exposure. This results in significantly fewer and less severe side effects and complications than are incurred with other conventional therapies. RP generally results in a 50% to 90% impotence rate and an incidence rate as high as 65% for incontinence, and EBRT generally results in impotence and incontinence rates of 40% to 60% and 8% to 18%, respectively. Conversely, brachytherapy patients experience 5% to 15% erectile dysfunction while there is a close to zero incidence of incontinence according to Wessels, Arnold, and Henderson Industry Data. According to a 1995 study by the Northwest Tumor Institute described above, it was reported that 85% of seed therapy patients under 70 years of age who were potent before the procedure remained so. In addition, patients who had not had a previous transurethral prostate resection (TURP) suffered no incontinence. Patients having a previous TURP have compromised urinary tracts and can experience higher rates of incontinence. Patients receiving seeding can expect some urethra irritation and urinary urgency post-implantation as the Pd-103 delivers its radiation dose.

A five-year study, using either Pd-103 or I-125 seed implants, published in the August 2001 edition of *International Journal of Radiation Oncology, Biology and Physics* promotes brachytherapy treatment for early-stage prostate cancer in men under 65 while indicating lower incidence of side effects such as incontinence and impotence. According to Dr. Gregory Merrick of Schiffler Cancer Center in Wheeling, West Virginia, the findings from the study involving 76 patients ranging in ages between 48 and 62 years who received seed implants between the period of 1995 to 1999 are encouraging "because it shows younger men that they can survive cancer with a significantly lower incidence of side effects."

Lower Treatment Cost. The total cost of seeding is approximately \$15,000 per procedure. This is approximately two-thirds the cost of RP, which ranges from \$19,000 to \$25,000, excluding treatment for side effects and post-operative complications. Seeding cost is comparable to the cost of EBRT, which ranges from \$13,000 to \$17,000 for a six-to-seven week course of treatment.

Management believes TheraSeed® represents the best available form of seeding. Another radioactive isotope, I-125, is also commercially available as a permanent implant. TheraSeed® was the first commercially available alternative isotope to I-125 since I-125's introduction over 20 years ago. Management believes that I-125 and Pd-103 are used in approximately 70% and 30%, respectively, of all prostate cancer seeding procedures. Another technique known as "temporary seeding," which involves the temporary placement of an Iridium-based source in or near a tumor, is used in a very small percentage of cases. Management believes Pd-103 has the following advantages over I-125: (i) Pd-103 delivers three times the initial dose rate of I-125, which can yield advantages in treating aggressive cancers, (ii) Pd-103 has approximately one-third the half-life of I-125, which shortens the duration of some radiation induced side effects by two-thirds and reduces radiation exposure to medical personnel in treatment follow-up; and (iii) unlike I-125, Pd-103 is nontoxic and non-volatile as it decays.

A seven-year, peer-reviewed study conducted at Yale University School of Medicine published in the October 29, 1999, issue of *Radiation Oncology Investigations: Clinical and Basic Research*

demonstrated that patients receiving TheraSeed® Pd-103 seed implants experienced significantly lower incidences of side effects than patients implanted with I-125. Overall severe complication rates from both I-125 and Pd-103 are very low when compared to other treatment modalities. Only 9% of the patients involved in the study performed at Yale experienced long-term complications, none of whom were implanted with TheraSeed®. Furthermore, the study indicates that the minimum tumor dose for implants performed with TheraSeed® may be increased without comprising side effect results.

Production

The production of TheraSeed® is dependent upon the availability of Pd-103, as well as Rh-103, titanium, graphite and lead. With the exception of Pd-103, all of these raw materials are relatively inexpensive and readily available from third party suppliers.

Pd-103 is a radioactive isotope that can be produced by neutron bombardment of Pd-102 in a nuclear reactor, or by proton bombardment of Rh-103 in a cyclotron. Following the production of Pd-103 from Rh-103 in the cyclotron, the Pd-103 is harvested from the cyclotron and moved through a number of proprietary production processes until it reaches its final seed form.

The Company has produced Pd-103 using Company-owned cyclotrons since 1993. The Company currently has fourteen cyclotrons in production, and has no current plans to purchase additional cyclotrons. The Company's cyclotrons were designed, built, installed and tested by a company specializing in the construction of such equipment.

Cyclotron operations constitute only one component of the TheraSeed® manufacturing process. Because the production of TheraSeed® is highly sensitive and labor intensive, Management is focusing significant attention and effort on automating and otherwise improving all aspects of the Company's manufacturing process. Certain portions of the Company's production processes were automated during the past four years. Although the automation process is difficult and time consuming, and has been subject to significant delays, Management believes it can continue to improve efficiency, further reduce radiation exposure to personnel and provide additional production capacity for TheraSeed®.

Since 1997, the Company's quality control system has been certified as meeting all the requirements of the International Organization for Standards' ISO 9001/EN46001 Quality System Standard.

The DOE has granted Theragenics access to unique DOE technology, known as the PSP, for use in production of isotopes, including Pd-103 (the "PSP Project"). The Company has constructed facilities and infrastructure to support the use of this DOE technology. The facilities are expected to become operational during 2002, though no revenues are expected from the PSP Project in 2002. (see Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operations").

As a result of the sensitive nature of the PSP equipment and the specialized technology involved, the DOE can terminate the Company's access in the event of national emergency or in the interest of national defense, or require the Company to perform work involving programmatic use of the technology for the DOE in connection with carrying out its governmental mission. The Company would be entitled to compensation in the event of termination in connection with national emergency or defense or for programmatic use of the technology for the DOE.

Marketing

From May 1997 until August 2000, Indigo Medical, Inc. (Indigo) held the exclusive worldwide rights to market and sell the TheraSeed® implant for prostate cancer under a Sales and Marketing Agreement with TheragenicsTM (the "Agreement"). Under the Agreement, Indigo had the responsibility

for the marketing and training related to the TheraSeed® implant. In August 2000 Indigo exercised its option and gave notice of termination of the Agreement. As a result of Indigo's notice of termination, TheragenicsTM regained the right to directly market and distribute its TheraSeed® product for the treatment of prostate cancer to physicians and third-party distributors. Subsequent to Indigo's notice of termination, the Company has executed non-exclusive distribution agreements with four companies for the distribution of TheraSeed® (see Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operation").

Management does not currently intend to develop an internal sales and marketing organization. The Company does intend to support the TheraSeed® brand and its non-exclusive distributors with a significant increase in advertising to consumers and physicians, clinical studies aimed at showing the superiority of TheraSeed® in the treatment of prostate cancer, technical field support to TheraSeed® customers and other customer service and patient information activities (see Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operation").

TheraSphere®

TheragenicsTM has also participated in the development of TheraSphere®, a microscopic radioactive glass sphere designed for the treatment of liver cancer. The Company holds a worldwide exclusive license from the University of Missouri for the use of the technology required to produce TheraSphere®. The Company has granted to Nordion International, Inc. (Nordion) an exclusive worldwide sublicense to manufacture, distribute and sell TheraSphere® for any application. Under the terms of the sublicense, Nordion has agreed to obtain the necessary regulatory approvals for distribution of TheraSphere® in the United States and other countries. TheraSphere® has been approved for distribution in Canada and is available in other markets outside North America, though sales of TheraSphere® have not been significant. Nordion was granted a Humanitarian Device Exemption (HDE) authorization from the FDA to market Therasphere®. The HDE does not represent full regulatory approval for distribution in the United States, and the timing for commercial development and regulatory approval of TheraSphere® in the United States and elsewhere is uncertain. Management does not anticipate significant revenues from TheraSphere® within the foreseeable future.

A TheraSphere® treatment dose contains approximately five million Yttrium-90 glass spheres that are each approximately half the diameter of a human hair. In the treatment of liver cancer, a radiation dose is delivered to the tumor by introducing TheraSphere® by catheter into the hepatic artery, which carries arterial blood to the liver. Because of greater blood flow to tumors compared to healthy liver tissue, the microspheres concentrate in the capillaries feeding the tumor. The concentration of microspheres in healthy tissue is much lower. Because of the ability to place and concentrate the radiation source in such close proximity to the tumor, TheraSphere® can deliver a radiation dose to the tumor cells five times as strong as that which can be delivered via external beam radiation.

Patents and Licenses: Trade Secrets

The Company holds United States patents directed to Palladium delivery devices for therapeutic uses and processes for making such devices. The Company also has corresponding patents in Canada, South Africa, Japan and the countries of the European Patent Convention, and a PCT patent application on file for Japan, Australia, New Zealand, Canada, and Europe (representing 16 European countries) as well as a direct filing in Mexico. The Company may file additional patent applications from time to time in connection with its existing business and research and development activities. The Company considers the ownership of patents important, but not necessarily essential, to its operations. The Company also uses a strategy of confidentiality agreements and trade secret treatment to provide primary protection to a number of proprietary design modifications in the cyclotrons, as well as various production processes.

The Company also holds a worldwide exclusive license from the University of Missouri for the

use of technology required for producing TheraSphere®. Theragenics holds the rights to all improvements developed by the University of Missouri on this technology. The Company, in turn, sublicenses exclusive worldwide rights to this technology and all improvements to Nordion. Pursuant to its license agreement with the University of Missouri, the Company is obligated to pay the University the greater of a fixed annual amount or a percentage of the gross sales amount derived from the sale of TheraSphere®.

TheragenicsTM holds patents for technology concerning methods for delivery of TheraSphere® in several countries, including the United States, Canada, Australia, Argentina, South Africa and the countries of the European patent convention, and has patent applications on file in other countries, including Japan. The Company exclusively licenses this technology to Nordion for worldwide use.

The Company also relies to a significant degree on trade secrets, proprietary know-how and technological advances that are either not patentable or which the Company chooses not to patent. In particular, the Company has designed certain modifications to its cyclotrons as well as various production processes that it deems to be proprietary. The Company seeks to protect non-patented proprietary information, in part, by confidentiality agreements with suppliers, employees and consultants.

Seasonality

Although effects from seasonality cannot be identified in relation to a specific quarter or quarters, management believes that holidays, major medical conventions and vacations taken by physicians, patients and patients' families may have a seasonal impact on salesfor TheraSeed®.

Research and Development

R&D expenses were \$2.7 million, \$2.1 million, and \$709,000 in 2001, 2000 and 1999, respectively. R&D expenses have related primarily to restenosis studies and development efforts to improve the Company's proprietary production processes (see Item 7 – "Management's Discussion and Analysis of Financial Condition and Results of Operations, 2001 compared to 2000").

Competition

The Company competes in a market characterized by technological innovation, extensive research efforts and significant competition. In general, TheraSeed® competes with conventional methods of treating localized cancer, such as RP and EBRT, as well as competing permanent implant devices. RP currently represents the most common medical treatment for early-stage, localized prostate cancer. RP has a long history of favorable clinical results and physicians have developed a high degree of familiarity and comfort with this procedure. EBRT is also a well-established method of treatment and is widely accepted for patients who do not represent a good surgical risk or whose prostate cancer has advanced beyond the stage for which surgical treatment is indicated. Management believes that if general conversion from these treatment options (or other established or conventional procedures) to TheraSeed® treatment does occur, such conversion will be the result of a combination of equivalent or better efficacy, reduced incidence of side effects and complications, lower cost, other quality of life issues and pressure by health care providers and patients.

I-125 is commercially available as a permanent implant and competes with TheraSeed®. A number of companies have obtained regulatory approval to produce and distribute I-125 seeds and a number of other companies have announced their intentions to apply for such approval. Management believes that I-125 and Pd-103 are used in approximately 70% and 30%, respectively, of all prostate cancer seeding procedures.

Management believes that Pd-103 has certain advantages over I-125. A seven-year study

conducted at Yale University School of Medicine demonstrated that patients receiving TheraSeed® Pd-103 implants experienced significantly lower incidences of side effects than patients implanted with I-125. The results of this peer-reviewed study appeared in the October 29, 1999 issue of "Radiation Oncology Investigations: Clinical and Basic Research". A review of 123 early stage T1 and T2 prostate cancer patients implanted between 1992 and 1999 with I-125 or TheraSeed® revealed an overall complication rate of 0% with TheraSeed® versus 13% for I-125. Most important, the grade III-IV complication (bladder, urethra, and rectum) rate for TheraSeed® was 0% versus 6% for I-125. The three-year actuarial probability of remaining free of long-term complications was 100% for TheraSeed® versus 82% for I-125. The study also reported that a review of the literature for 992 patients implanted with I-125 versus 540 patients implanted with TheraSeed® shows a consistently higher complication rate for I-125 versus TheraSeed®.

Management believes that certain characteristics of Pd-103 can lead to continued improved results over I-125, including: (i) a higher dose rate, which can yield advantages in treating aggressive cancers; (ii) a shorter half-life, which shortens the duration of some radiation induced side effects by two-thirds and reduces radiation exposure to medical personnel in treatment follow-up; and (iii) unlike I-125, Pd-103 is non toxic and non-volatile as it decays.

Several companies have obtained regulatory approval to produce and distribute Pd-103 seeds, which compete directly with TheraSeed®. A number of other companies have also announced their intentions to apply for regulatory approval to produce and distribute Pd-103 seeds. Management believes that Theragenics has competitive advantages over these companies including: (i) its proprietary production processes that have been developed and patented; (ii) its record of reliability and safety in its manufacturing operations; (iii) the time and resources required for competitors' production capabilities to ramp up to commercial production on a scale comparable to Theragenics'TM; and (iv) the non-exclusive distribution agreements that the Company currently has in place, which allow it to leverage multiple distribution channels and access multiple marketing approaches and philosophies.

At any point in time, management of TheragenicsTM and/or its non-exclusive distributors may change their respective pricing policies for TheraSeed® in order to take advantage of market opportunities or respond to competitive situations. Responding to market opportunities and competitive situations could have an adverse effect on the prices of TheraSeed® and/or could have a favorable effect on market share and volumes, while failure to do so could adversely affect market share and volumes although per unit pricing could possibly be maintained.

In addition to the competition from the procedures and companies noted above, many companies, both public and private, are researching new and innovative methods of preventing and treating cancer. In addition, many companies, including many large, well-known pharmaceutical, medical device and chemical companies that have significant resources available to them, are engaged in radiological pharmaceutical and device research. These companies are located in the United States, Europe and throughout the world. Significant developments by any of these companies could have a material adverse effect on the demand for Theragenics' TM products.

Government Regulation

The Company's present and future intended activities in the development, manufacture and sale of cancer therapy products are subject to extensive laws, regulations, regulatory approvals and guidelines. Within the United States, the Company's therapeutic radiological device must comply with the U.S. Federal Food, Drug and Cosmetic Act, which is enforced by the FDA. As a result of receiving its CE Marking during 1998, the Company must also comply with the regulations of the Competent Authorities of the European Union for TheraSeed® sold in the member nations of the European Union.

The Company is also required to adhere to applicable FDA regulations for Good Manufacturing

Practices, including extensive record keeping and periodic inspections of manufacturing facilities.

The Company obtained FDA 510(k) clearance in 1986 to market TheraSeed® for, in general, the treatment of localized solid tumors. A new 510(k) clearance would be required for any modifications in the device or its labeling that could significantly affect the safety or effectiveness of the original product.

The Company's handling of radioactive materials is governed by the State of Georgia in agreement with the Nuclear Regulatory Commission (NRC). The users of TheraSeed® are also required to possess licenses issued either by the states in which they reside or the NRC (depending upon the state involved and the production process used). The Company's expansion plans require the Company to secure additional permits and licenses from a number of environmental, health and safety regulatory agencies. The Company believes, but cannot assure, that it will be able to acquire the permits and licenses necessary for its planned expansion of its manufacturing capacity in accordance with its timetable. To date, the Company has not experienced delays in licensing any of its facilities or cyclotrons.

The Company is required under its radioactive materials license to maintain radiation control and radiation safety personnel, procedures, equipment and processes, and to monitor its facilities and its employees and contractors. The Company is also required to provide financial assurance that adequate funding will exist for end-of-life radiological decommissioning of its cyclotrons and other radioactive areas of its property that contain radioactive materials. The Company's decommissioning obligations will increase as its production capacity is expanded.

The Company disposes of low level radioactive waste to licensed commercial radioactive waste treatment or disposal facilities for incineration or land disposal. Management believes the Company is in compliance with all state and federal regulations in this regard. The Company provides training and monitoring of its personnel to facilitate the proper handling of all materials.

The U.S. DOE has granted TheragenicsTM access to unique DOE technology, known as the PSP, for use in production of isotopes. U.S. Government Export Control Laws and Regulations govern the exporting of certain products produced in the PSP and the exporting of technology associated with the PSP.

Employees

As of December 31, 2001, the Company had 160 full time employees (including full time temporary employees and executive personnel). Of this total, 110 were engaged in the development and production of the Company's products. The remainder were engaged in marketing and general corporate activities. The Company's employees are not represented by a union or a collective bargaining agreement, and management considers employee relations to be good.

Item 2. Properties

The Company owns two manufacturing facilities located in Buford, Georgia. One facility houses cyclotrons, raw material processing, assembly and shipping operations. The second facility, which is adjacent to the first facility, houses cyclotrons. The Company also owns an administrative facility adjacent to its production facilities in Buford.

The Company owns approximately 15 acres in Buford Georgia on which its two manufacturing facilities and administration facilities are located. Land remains available for future development adjacent to its current Buford location. Management intends to use this land for long term expansion of its manufacturing and support operations, if such expansion is required.

The Company leases 21 acres of land in the Oak Ridge, Tennessee area, on which it has

constructed a facility to house the equipment, infrastructure and workforce necessary to support operations using technology leased from the U.S. Department of Energy (see *Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operations"*).

Item 3. Legal Proceedings

In January 1999, the Company and certain of its officers and directors were named as defendants in certain securities actions alleging violations of the federal securities laws, including Sections 10(b), 20(a) and Rule 10b-5 of the Securities and Exchange Act of 1934, as amended. These actions have been consolidated into a single action pending in the U.S. District Court for the Northern District of Georgia. The complaint, as amended, purports to represent a class of investors who purchased or sold securities during the time period from January 29, 1998 to January 11, 1999. The amended complaint generally alleges that the defendants made certain misrepresentations and omissions in connection with the performance of the Company during the class period and seeks unspecified damages. On May 14, 1999, a stockholder of the Company filed a derivative complaint in the Delaware Court of Chancery purportedly on behalf of the Company, alleging that certain directors breached their fiduciary duties by engaging in the conduct that is alleged in the consolidated federal class action complaint. The derivative action has been stayed by the agreement of the parties. On July 19, 2000, the Court granted the Company's motion to dismiss the consolidated federal class action complaint for failure to state a claim against the Company. and granted the plaintiffs leave to amend their complaint. On August 21, 2000, the plaintiffs filed a second amended complaint and on March 30, 2001, the Court denied the defendants motion to dismiss the plaintiff's second amended complaint. The Court also denied the Company's motion for reconsideration, and discovery is underway. Management believes these charges are without merit and intends to vigorously oppose the litigation, however, given the nature and early stage of the proceedings, the ultimate outcome of the litigation cannot be determined at this time. Accordingly, no provision for any liability that might result from this litigation has been made. The Company maintains insurance for claims of this general nature.

Item 4. Submission of Matters to a Vote of Security Holders

The Company did not submit any matter to a vote of its security holders during the fourth quarter of calendar year 2001.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

The Company's Common Stock, \$.01 par value, (Common Stock) is traded on the New York Stock Exchange (NYSE) under the symbol "TGX". The high and low prices for the Company's Common Stock as reported on the NYSE for each quarterly period in 2000 and 2001 are as follows:

| <u>Hign</u> | <u>Low</u> |
|-------------|---|
| | |
| \$7.90 | \$5.38 |
| 13.79 | 6.10 |
| 11.76 | 7.46 |
| 10.47 | 8.20 |
| | |
| | |
| \$16.63 | \$8.13 |
| 13.25 | 6.94 |
| 9.81 | 6.31 |
| 6.63 | 3.94 |
| | 13.79 11.76 10.47 \$16.63 13.25 9.81 |

As of March 14, 2002, the closing price of the Company's Common Stock was \$8.75 per share. Also, as of that date, there were approximately 621 holders of record of the Company's Common Stock. The number of record holders does not reflect the number

of beneficial owners of the Company's Common Stock for whom shares are held by depositary trust companies, brokerage firms and others.

The Company has a Stockholder Rights Plan (the "Rights Plan"), which contains provisions designed to protect the Company's stockholders. Pursuant to the Rights Plan, each share of the Company's Common Stock contains a share purchase right (a "Right"). The Rights expire in February 2007, and do not become exercisable unless certain events occur; including, the acquisition of, or commencement of a tender offer for, 15% or more of the outstanding Common Stock. In the event certain triggering events occur, including the acquisition of 20% or more of the outstanding Common Stock, each Right that is not held by the 20% or more stockholder will entitle its holder to purchase additional shares of Common Stock at a substantial discount to then current market prices. The Rights Plan and the terms of the Rights, which are set forth in a Rights Agreement between the Company and SunTrust Bank, Atlanta, as Rights Agent, could add substantially to the cost of acquiring the Company, and consequently could delay or prevent a change in control of the Company.

Dividend Policy

The Company has never declared or paid a cash dividend on its Common Stock. It is the present policy of the Board of Directors to retain all earnings to support operations and to finance expansion. Consequently, the Board of Directors does not anticipate declaring or paying cash dividends on the Common Stock in the foreseeable future. The Company's current credit facility restricts the Company's ability to pay dividends if such dividend payment would cause a default under any of the credit facility's financial covenants. Decisions on the payment and amount of any dividends on the Common Stock will depend on the Company's results of operations, capital requirements and financial condition and other relevant factors as determined by the Board of Directors.

Stock Split

On March 16, 1998, the Board of Directors approved a two-for-one Common Stock split, effected in the form of a 100% stock dividend, which was distributed on April 15, 1998, to stockholders of record on March 31, 1998. All references to shares outstanding and per share amounts contained herein have been restated to reflect the stock split.

Item 6. Selected Financial Data

The selected financial data set forth below as of December 31, 2000 and 2001 and for each of the three years in the period ended December 31, 2001, have been derived from the financial statements of the Company included elsewhere herein, which have been audited by Grant Thornton LLP, independent certified public accountants. The selected financial data as of December 31, 1997, 1998 and 1999, and for each of the two years in the period ended December 31, 1998, have been derived from the financial statements of the Company, which have been audited by Grant Thornton LLP but are not included herein. The selected financial data set forth below should be read in conjunction with the financial statements of the Company and related notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere herein.

| | 1997 | Year Ended December 31, 1998 1999 2000 | | | 2001 | |
|--|---------------------|---|---------------------|---------------------|----------------|--|
| (Amounts in thousands, except per share data) | | | | | | |
| Statement of Earnings Data: | | | | | | |
| Product sales | \$24,457 | \$37,858 | \$43,618 | \$43,898 | \$49,667 | |
| Licensing fees | 100 | 100 | 100 | 106 | 333 | |
| Total revenue | $24,\overline{557}$ | $3\overline{7,958}$ | $4\overline{3,718}$ | $4\overline{4,004}$ | 50,000 | |
| Cost of product sales | 6,141 | 10,869 | 13,293 | 13,578 | 14,641 | |
| Gross profit | $1\overline{8,416}$ | 27,089 | 30,425 | 30,426 | 35,359 | |
| Selling, general and administrative | 4,819 | 6,000 | 6,300 | 6,872 | 10,448 | |
| Research and development | <u>55</u> | | 709 | 2,108 | 2,671 | |
| • | | 448 | | | | |
| Operating profit | 13,542 | | 23,416 | 21,446 | 22,240 | |
| | | 20,641 | | | | |
| Other income (expense) | <u>1,306</u> | 1,262 | 1,273 | 7,253 | <u>1,408</u> | |
| Net earnings before income taxes | 14,848 | 21,903 | 24,689 | 28,699 | 23,648 | |
| Income tax expense | <u>5,350</u> | <u>7,880</u> | <u>8,677</u> | <u>10,019</u> | <u>8,514</u> | |
| Net earnings | <u>\$9,498</u> | <u>\$14,023</u> | <u>\$16,012</u> | <u>\$18,680</u> | <u>15,134</u> | |
| Earnings per common share Basic | \$ 0.35 | \$ 0.48 | \$ 0.54 | \$ 0.63 | \$ 0.51 | |
| Diluted | \$ 0.33 | \$ 0.46 | \$ 0.53 | \$ 0.62 | \$ 0.50 | |
| Weighted average common shares | | | | | | |
| Basic | 27,526 | 29,259 | 29,478 | 29,534 | 29,627 | |
| Diluted | 28,618 | 30,315 | 29,960 | 29,962 | 30,029 | |
| | | | | | | |
| | 100- | _ | December 31, | | •••• | |
| | <u>1997</u> | <u>1998</u> | <u>1999</u> | <u>2000</u> | <u>2001</u> | |
| (In thousands) | | | | | | |
| Balance Sheet Data: | 000.160 | \$10.540 | 010 7 6 7 | #20 722 | 4.5.050 | |
| Cash and short-term investments | \$30,162 | \$19,542 | \$18,765 | \$29,722 | \$45,373 | |
| Marketable securities | 8,392 | 6,830 | 15,137 | 15,459 | 10,852 | |
| Property, plant and equipment, net | 28,986 | 53,258 | 64,081 | 75,632 | 76,830 | |
| Total assets | 71,200 | 88,273 | 108,043 | 130,700 | 144,007 | |
| Long-term debt, including current installments | - | - | _ | | - | |
| Shareholders' equity | 67,033 | 84,385 | 101,077 | 120,163 | 136,007 | |

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

Theragenics Corporation® is the manufacturer of TheraSeed® a rice-sized, FDA-cleared device used primarily in treating localized prostate cancer with a one-time, minimally invasive procedure. TheragenicsTM is the world's leading producer of Palladium-103 (Pd-103), the radioactive isotope that supplies the therapeutic radiation for its TheraSeed® implant. Physicians, hospitals and other healthcare providers, primarily located in the United States, utilize the TheraSeed® product. TheraSeed® has also been approved for marketing throughout the member countries of the European Union by obtaining its CE Marking. Sales of TheraSeed® in Europe were not significant in any of the three years in the period ended December 31, 2001.

From May 1997 to August 2000, substantially all TheraSeed® implants for the treatment of prostate cancer were sold through an exclusive distributor. Notice of termination of that exclusive distribution agreement was received in August 2000 ending Theragenics'TM contractual requirement to use an exclusive distributor. The contract was subsequently terminated in January 2001. The Company currently sells its TheraSeed® implants directly to physicians and non-exclusive third-party distributors.

The Company has an active and ongoing program targeted at diversifying its future revenue stream. As part of this program the Company constructed a facility in the Oak Ridge, Tennessee area to house the equipment, infrastructure and work force necessary to support the production of isotopes, including Pd-103, using unique plasma separation process (PSP) technology being leased from the U.S. Department of Energy (DOE). PSP technology is a method of separating relatively large quantities of a specific isotope from a specific element. In the past this technology had demonstrated the ability to produce material for the U.S. Government to support nuclear power generation. It was also utilized by TheragenicsTM to produce Pd-102 for conversion to Pd-103. In addition to possibly increasing its capacity and allowing for expanded use of Pd-103, the Company also believes that the DOE technology may allow it to produce other isotopically engineered materials for use in medical and non-medical applications.

R&D initiatives are also underway to support the Company's diversification program. Certain preclinical animal studies addressing the use of Pd-103 for the prevention of restenosis in coronary artery disease are underway. Restenosis is the renarrowing of blood vessels following procedures that are done to open stenosed (blocked) blood vessels. The use of Pd-103 for the treatment of age-related macular degeneration, a disease that leads to loss of eyesight and in some cases complete blindness, is also being studied, with preclinical animal trials expected to begin in 2002.

The Company is also searching for, reviewing and evaluating external opportunities for diversification such as joint ventures, partnerships, and/or the acquisition of technologies, products or companies.

RESULTS OF OPERATIONS

Year Ended December 31, 2001, Compared to Year Ended December 31, 2000

Revenues were \$50.0 million in 2001 compared to \$44.0 million in 2000, an increase of \$6.0 million, or 13.6%. During 2001, TheragenicsTM sold approximately 26% of unit sales directly to customers. In comparison, TheragenicsTM sold almost all of its 2000 unit sales to third-party distributors. Because direct-to-customer sales are made at higher prices than sales to third-party distributors, the average selling price of TheraSeed® increased from 2000 to 2001. Even though units sold during 2001 decreased 2.5% from 2000, the higher average selling price caused year-over-year revenue to increase.

From May 1997 to August of 2000 the Company was a party to a Sales and Marketing Agreement with Indigo Medical, Inc., a Johnson & Johnson company, (the "Indigo Agreement" and "Indigo," respectively) that granted Indigo exclusive worldwide marketing rights to TheraSeed® for the treatment of prostate cancer. In July 2000 the Company billed Indigo \$5.4 million for shortfalls in its purchase minimum

requirements, and Indigo gave notice of its intention to terminate the agreement. The Company continued to sell TheraSeed® implants to Indigo under this agreement on a non-exclusive basis from August 10, 2000, until January 5, 2001, when the agreement was terminated. Currently, in addition to direct-to-customer sales, TheragenicsTM has non-exclusive distribution agreements with four companies for the distribution of TheraSeed®. These five-year agreements give each distributor the right to distribute TheraSeed® in the U.S., Canada and Puerto Rico for the treatment of prostate cancer and other solid localized cancerous tumors. One of these non-exclusive agreements gives the distributor the option to distribute TheraSeed® internationally. A second of the four distributors also has the right, via a separate five-year agreement executed in March 2001, to distribute TheraSeed® internationally on a non-exclusive basis. The Company may continue to explore additional non-exclusive distribution agreements in order to take advantage of multiple distribution channels and expanded market coverage.

Several customers that had been purchasing from Indigo now purchase directly from TheragenicsTM, while many other former Indigo customers are purchasing TheraSeed® from Theragenics'TM non-exclusive distributors. Management expects that these non-exclusive distributors will continue to aggressively market to the former Indigo customers, and expects the percentage of direct sales of TheraSeed® units by the Company, and accordingly, its average revenue per TheraSeed® unit, to continue to decline.

The Company's licensing fees revenue represents licensing payments received for the Company's TheraSphere® technology. Such licensing fees are not expected to become material in the foreseeable future.

At any point in time, TheragenicsTM and/or its non-exclusive distributors may change their respective pricing policies for TheraSeed® in order to take advantage of market opportunities or respond to competitive situations. Responding to market opportunities and competitive situations could have an adverse effect on the prices of TheraSeed® and could have a favorable effect or prevent an unfavorable effect on market share and volumes. Failure to respond to market opportunities and competitive situations in order to maintain per unit pricing could adversely affect current or potential market share and volumes.

Cost of sales was \$14.6 million during 2001 compared to \$13.6 million in 2000, an increase of \$1.0 million. Gross profit increased slightly to 70.7% of revenue in 2001, compared to 69.1% in 2000. During 2001, 14 cyclotrons were in operation. During 2000, all 14 cyclotrons were not in operation until the third quarter. The increase in cost of sales in 2001 over 2000 was due to the increase in depreciation and operating costs related to the additional cyclotrons, plus an increase in salary and related expenses. The increase in salary-related costs reflects an increase in headcount and an employee mix more heavily weighted toward higher technical expertise.

Selling, general and administrative (SG&A) expenses were \$10.4 million in 2001, compared to \$6.9 million in 2000, an increase of \$3.5 million, or 50.7%. This increase was primarily due to an increase in advertising, marketing, customer service and cancer information expenses. Prior to September 2000, these expenses were borne by Indigo under the terms of the Indigo Agreement. Additionally, TheragenicsTM incurred additional expense as the Company increased its allowance for doubtful accounts receivable to reflect the possibility of nonpayment from its customers. Management believed it to be appropriate to increase this allowance because of the Company's move to direct sales and the lack of collection experience with the new non-exclusive distributors. Finally, compensation and benefits, and start up expenses associated with the Company's Plasma Separation Process Project (the PSP project) (see "Liquidity and Capital Resources" below), also increased during the 2001 periods.

In the third quarter of 2001 the Company engaged a marketing consultant with experience in health care and direct-to-consumer marketing, and expects direct-to-consumer advertising activity to increase significantly. The Company also expects to continue other activities in an attempt to support its brand and increase demand for TheraSeed® implants, including: advertising to physicians, clinical studies aimed at showing the advantages of TheraSeed® implants in the treatment of prostate cancer, technical field support to TheraSeed® customers, and other customer service and patient information activities. Accordingly, the Company expects that these efforts may increase marketing expenses by up to \$5.0 million in 2002.

R&D expenses increased to \$2.7 million, or 5.4% of revenue in 2001, from \$2.1 million, or 4.8% of

revenue in 2000. The Company's R&D initiatives in 2001 and 2000 related primarily to restenosis studies carried out by the Atlanta Cardiovascular Research Institute (ACRI) (see below), and development efforts to improve the Company's proprietary production processes. The Company's research and development initiatives are intended to expand the application of Pd-103 to other oncological and non-oncological uses, and to explore options for using the Company's expertise and capabilities in other areas. Management plans to continue to increase efforts in R&D as its initiatives to diversify move forward and expects R&D expenditures to increase proportionately. However, R&D spending is dependent on the complex scheduling of R&D activities in progress as well as the pursuit of other appropriate opportunities as they arise. Accordingly, R&D expenses may fluctuate significantly from period to period.

As part of its R&D initiatives, the Company has an agreement with the ACRI to conduct pre-clinical animal studies addressing the use of Pd-103 for the prevention of restenosis in coronary artery disease. Early phases of the studies have indicated that the inhibitory effects of Pd-103 are similar to that of other emitters, both beta and gamma. The Company is continuing its pre-clinical animal studies, and expects additional data to be available in 2002. The Company has met with representatives of the U.S. Food and Drug Administration (FDA) to present the results of the pre-clinical animal studies, discuss further pre-clinical studies planned, and discuss the requirements and timing on proceeding with human clinical studies using TheraSourceTM, the Company's proprietary Pd-103 source. The Company is planning to provide TheraSourceTM for an human clinical feasibility trial for restenosis in peripheral vessels in 2002. However, the commencement and completion of any human clinical feasibility trials will be dependent upon the investigator receiving the appropriate approvals and authorizations necessary for carrying out this trial, including the submission and FDA approval of an Investigational Device Exemption.

The market for the prevention of restenosis is characterized by rapid technological innovation, significant research efforts and continual scientific discoveries. Many innovative treatments for the prevention of restenosis are currently being studied, all at different stages of development. Many companies are involved in research in this area, some with significant resources available to them. Theragenics™ believes that the treatment of restenosis and vascular disease will continue to evolve at a rapid pace, and the Company's development efforts in this area will continue to be flexible.

Other R&D efforts are also underway, including the use of Pd-103 in treating the wet form of agerelated macular degeneration. The Company has developed a prototype device for macular degeneration animal studies and expects to begin these studies during 2002.

Other income (exclusive of minimum income), primarily comprised of interest income, was \$1.4 million in 2001 compared to \$1.8 million in 2000. The Company's investments consist primarily of short-term cash investments and high-credit quality municipal obligations, in accordance with the Company's investment policies. While additional funds were available for investment during 2001, the interest rate environment during 2001 has reduced the effective returns on a significant portion of the Company's investments. Funds available for investment have been and will continue to be utilized for the Company's current and future expansion programs and R&D activities, and may be used for the acquisition of technologies, products or companies consistent with the goals of TheragenicsTM. As funds continue to be used for these programs and activities, and as interest rates continue to change, Management expects other income to fluctuate accordingly.

The Company recognized \$5.4 million of other income in 2000 related to purchase minimum shortfalls under the Indigo Agreement. This increased net earnings during 2000 by \$3.5 million, or \$.12 per diluted share.

The Company's effective income tax rate was approximately 36% and 35% for 2001 and 2000, respectively. The increase is a result of a reduction in tax credits generated by the Company's investments in its expansion projects and research activities during 2001. The Company expects further reductions in its tax credits in 2002. The Company's income tax rate in each period is lower than the statutory rates primarily due to the recognition of tax credits generated by the Company's investments in its expansion projects and research activities, and tax-exempt interest income.

MEDICARE DEVELOPMENTS

The Centers for Medicare and Medicaid Services (CMS) are promulgating changes in future payments under Medicare Part B that hospitals will receive for providing brachytherapy in outpatient departments. The previously published reimbursement rates for 2002, which were announced November 2001, were delayed due to technical errors. Under the previously published rule, reductions in payments for medical devices of approximately 10% to 20% may have occurred. After reevaluating its previous calculations, CMS has now established significantly more favorable reimbursement for brachytherapy.

Specifically, effective April 1, 2002, CMS will be implementing changes in hospital payments for brachytherapy and other services provided under Medicare's Outpatient Prospective Payment System (OPPS). Theragenics'TM TheraSeed® implant and other brachytherapy seeds currently fall within various "transitional pass-through codes," which are separate from the procedure payment codes that comprise much of OPPS. During the last nine months of 2002, CMS will bundle a portion of the pass-through reimbursement for brachytherapy seeds and other pass-through devices with the associated procedure codes. In effect, this will shelter the bundled portion of reimbursement for seeds from "pro rata reductions" that otherwise would apply this year to pass-through payments under Medicare law. For many TheraSeed® implant patients, we anticipate that the pass-through seed and device costs will remain near or below the maximum amount to be bundled with new payment codes, rendering significant pro rata payment reductions unnecessary for these patients. To the extent that pass-through device costs exceed the bundled amount, the remaining costs will be subject to a 63.6% pro rata reduction.

As CMS officials consider OPPS payment policies for calendar year 2003 and beyond, TheragenicsTM will continue to work with policymakers to help ensure that Medicare policies account for the unique aspects of classification and reimbursement that apply to the TheraSeed® implant and the brachytherapy area in general. Reductions in payments under OPPS for brachytherapy seeds could reduce the competitive advantages of TheraSeed® over competing treatments.

Year Ended December 31, 2000, Compared to Year Ended December 31,1999

Revenues were \$44.0 million in 2000 compared to \$43.7 million in 1999, an increase of \$300,000 or 0.7%. Revenue during the second half of 2000 was impacted by the termination of the Company's relationship with Indigo, and the change to a sales and marketing strategy utilizing non-exclusive distributors.

The Company's licensing fees revenue represents licensing payments received for the Company's TheraSphere® technology.

Gross profit decreased to 69.1% of revenue in 2000 from 69.6% of revenue in 1999. This decline in gross profit margin was primarily a result of the increase in depreciation expense for the additional cyclotrons that were ordered almost two years before to meet sales forecasts made at that time by Indigo. The non-cash depreciation charge related to manufacturing for 2000 increased to \$5.0 million from \$3.6 million for 1999. The increase reflects 14 cyclotrons being in operation by December 31, 2000, versus only 11 cyclotrons in operation by December 31, 1999. The increase in depreciation was partially offset by improved efficiencies and automation in the Company's proprietary production processes, and the utilization of certain manufacturing materials and resources in R&D activities.

SG&A expenses were \$6.9 million in 2000 compared to \$6.3 million in 1999, an increase of \$600,000 or 9.5%. This increase was primarily due to an increase in compensation and benefits, customer service and patient information expenses which had been previously borne by Indigo prior to September 2000, and start-up costs related to the Company's construction project in Oak Ridge, Tennessee. These increases were partially offset by a reduction in legal and professional fees.

R&D expenses increased to \$2.1 million, or 4.8% of revenue, in 2000, compared to \$709,000, or 1.6% of revenue, in 1999. The increase in R&D expenses was a result of the Company's R&D initiatives, including restenosis studies carried out by the ACRI, and development efforts to improve the Company's proprietary production processes.

Other income, excluding minimum income described below, increased to \$1.8 million in 2000 from

\$1.3 million in 1999. Other income consists primarily of interest income generated from the Company's short-term investments and high quality municipal bond investments. The increase was attributable to additional funds being available for investment during 2000 as a result of cash generated from operations.

The Company recognized \$5.4 million of other income in the third quarter of 2000 related to Theragenics' TM billing for purchase minimum shortfalls under the Indigo Agreement. This increased net earnings during 2000 by \$3.5 million, or \$.12 per diluted share.

The Company's effective income tax rate was approximately 35% for 2000 and 1999. The Company's income tax rate in each period is lower than the statutory rates primarily due to the recognition of tax credits generated by the Company's investments in its expansion projects and research activities, and tax-exempt interest income.

LIQUIDITY AND CAPITAL RESOURCES

The Company had cash, short-term investments and marketable securities of \$56.2 million at December 31, 2001, compared to \$45.2 million at December 31, 2000. Marketable securities consist primarily of high-credit quality municipal obligations, in accordance with the Company's investment policies. The increase in cash, short-term investments and marketable securities was a result of cash generated by operations, partially offset by capital expenditures. Working capital was \$65.3 million at December 31, 2001, compared to \$49.9 million at December 31, 2000. The Company also has an Unsecured Credit Agreement with a financial institution that provides for maximum borrowings of \$40.0 million under two lines of credit, and an additional uncommitted \$10.0 million line of credit. The Unsecured Credit Agreement expires in August 2003. Letters of credit totaling approximately \$810,000 were outstanding under the terms of the Unsecured Credit Agreement at December 31, 2001.

Cash generated by operations was \$18.0 million and \$28.6 million in 2001 and 2000, respectively. Cash generated from operations consists of net earnings plus non-cash expenses such as depreciation, amortization and deferred income tax expense. Depreciation and amortization increased to \$5.7 million in 2001 from \$5.5 million in 2000. The increase in depreciation and amortization was a result of the increase in the number of cyclotrons that were operational during 2001.

The Company's primary use of cash in 2001 and 2000 related to capital spending to increase manufacturing capacity and support diversification efforts. Capital expenditures were \$7.4 million and \$17.3 million in 2001 and 2000, respectively. These expenditures related primarily to the Company's PSP Project (see below), the addition of cyclotrons and supporting facilities and the Company's new headquarters facility. The Company expects capital spending on current expansion to decrease in 2002 as the PSP Project is completed.

The DOE has granted Theragenics™ access to unique DOE technology, known as the PSP, for use in production of isotopes, including Pd-103. This technology venture represents part of a DOE initiative to redirect Cold War assets to peacetime use and cushion the economic impact of U.S. Defense Department cutbacks. The Company expects that the use of the PSP technology could significantly increase its Pd-103 capacity and allow for expanded use of Pd-103 and TheraSeed® beyond treatment of prostate cancer to new medical applications. The Company also believes that the PSP Project may allow it to explore options for applying this technology to other uses, including the production of isotopically engineered materials for use in medical and non-medical applications, though there are no assurances that this will be achieved. The Company has constructed a facility in the Oak Ridge, Tennessee area to house the equipment, infrastructure and work force necessary to support the production of isotopes, including Pd-103, using this DOE technology. Construction costs of approximately \$24.1 million have been incurred on the PSP Project through December 31, 2001, and the Company expects to additionally invest up to \$5.9 million in 2002 to complete this manufacturing and R&D facility. The PSP Project is expected to become operational in 2002, though no significant revenues are expected to be generated from the PSP Project in 2002.

As part of the PSP Project, the Company has leased land in the Oak Ridge, Tennessee area and equipment previously used by the government to produce isotopes. As a result of the sensitive nature of the equipment, the specialized technology involved and the restrictions on access to unique DOE-operated

facilities, the Company has contracted with the DOE's primary contractor for its Oak Ridge facilities to handle certain technical and operational services that are critical to the project, including reassembling and recommissioning equipment, designing and fabricating new parts and modifications to the equipment and DOE facilities, and operating and providing ongoing access to the DOE facilities. The success of the project is dependent on the continued cooperation of the DOE and its primary contractor, which could be adversely affected by future changes in governmental program priorities and funding. If the equipment cannot be recommissioned successfully, if there are problems with the operation or modification of the DOE-operated facilities, or if unforeseen challenges arise, the project may not be successful or the costs or timeliness associated with the project could exceed current estimates. Additionally, as a result of the sensitive nature of the PSP equipment and the specialized technology involved, the DOE can terminate the Company's access in the event of national emergency or in the interest of national defense, or require the Company to perform work involving programmatic use of the technology for the DOE in connection with carrying out its governmental mission. The Company would be entitled to compensation in the event of termination in connection with national emergency or defense or for programmatic use of the technology for the DOE.

In addition to using cash to complete the PSP Project in 2002, the Company expects that R&D spending will continue to increase. Pre-clinical animal studies addressing the use of Pd-103 for the prevention of restenosis are underway, and the Company is working toward providing material for an human clinical feasibility trial in 2002. Other R&D activities are also occurring (see "Results of Operations" above). R&D spending has fluctuated and could continue to do so depending on the scheduling and progress of R&D activities as well as the pursuit of currently unforeseen opportunities. Cash could also be used in 2002 for increased marketing and TheraSeed® support activities, and in the pursuit of diversification efforts such as the purchase of technologies, products or companies.

Cash provided by financing activities was \$362,000 and \$121,000 in 2001 and 2000, respectively, consisting of cash proceeds from the exercise of stock options and the Company's Employee Stock Purchase Plan.

The Company believes that current cash and investment balances, cash from future operations and credit facilities, will be sufficient to meet its currently anticipated working capital and capital expenditure requirements. In the event additional financing becomes necessary, management may choose to raise those funds through other means of financing as appropriate.

SIGNIFICANT ACCOUNTING POLICIES

Our significant accounting policies are more fully described in Note B to our financial statements. However, certain of our accounting policies are important to the portrayal of our financial position and results of operations and require the application of judgment by our management.

Allowance for doubtful accounts. Management judgments and estimates are made and used in connection with establishing an allowance for the possibility that portions of our accounts receivables balances may become uncollectable. Accounts receivable are reduced by this allowance for amounts that may become uncollectible in the future. Specifically, management analyzes accounts in relation to current economic trends and changes in our customer payment history in establishing this allowance. Our accounts receivable balance, net of the provision for this trade accounts receivables allowance of \$.3 million, was approximately \$7.2 million as of December 31, 2001.

Property, Plant and Equipment. Property, plant and equipment are recorded at cost and are depreciated on a straight-line basis over the estimated useful lives of such assets. The Company's estimates can result in differences from the actual useful lives of certain assets. We currently own and operate 14 cyclotrons, the first of which entered service in 1993. Each of the Company's cyclotrons is depreciated using an estimated 10-year life. The cyclotrons incorporate a number of proprietary design modifications that render the cyclotrons unique to commercial applications. Management's estimate of the useful life of these cyclotrons is based on the Company's experience to date with these cyclotrons. As management continues to gain experience relative to the operation, repair, refurbishment, and maintenance of these cyclotrons, the Company may reassess the useful lives of the machines. Management will continue to periodically examine

estimates used for depreciation for reasonableness in relation to the cyclotrons. If the Company determines that the useful life of property, plant or equipment should be shortened or lengthened, depreciation expense would be adjusted accordingly for the remaining useful life (lives) of the identified asset(s).

FORWARD-LOOKING STATEMENTS

This document contains certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 including, without limitation, statements regarding sales, marketing and distribution efforts, sales mix, effectiveness of non-exclusive distribution agreements, pricing for TheraSeed®, future cost of sales, third-party reimbursement, R&D efforts and expenses, SG&A expenses, other income, timing and ultimate outcome of the Company's activities in restenosis, macular degeneration and other diversification efforts, potential new products and opportunities, the PSP Project, and the sufficiency of the Company's liquidity and capital resources. From time to time, the Company may also make other forward-looking statements relating to such matters as well as anticipated financial performance, business prospects, technological developments, R&D activities and similar matters. These forward-looking statements are subject to certain risks, uncertainties and other factors which could cause actual results to differ materially from those anticipated, including risks associated with R&D activities, including animal studies and clinical trials related to new products, risks associated with new product development cycles, effectiveness and execution of marketing and sales programs of TheragenicsTM and its non-exclusive distributors, potential costs and delays in the start-up of the Oak Ridge facility, potential changes in product pricing and competitive conditions, continued acceptance of TheraSeed® by the market, execution and effectiveness of competitors, management of growth, acceptance and efficacy of Pd-103 for other applications, adverse changes in governmental program priorities and budgetary funding by the relevant governmental authorities, potential costs and delays in the startup and refinement of technology and related equipment, potential equipment failure, government regulation of the therapeutic radiological pharmaceutical and device business, and potential changes in third-party reimbursement. All forward-looking statements and cautionary statements included in this document are made as of the date hereby based on information available to the Company as of the date hereof, and the Company assumes no obligation to update any forward looking statement or cautionary statement.

Quarterly Results

The following table sets forth certain statement of operations data for each of the Company's last eight quarters. This unaudited quarterly information has been prepared on the same basis as the annual audited information presented elsewhere in this Form 10-K, reflects all adjustments (consisting only of normal, recurring adjustments) which are, in management's opinion, necessary for a fair presentation of the information for the periods covered and should be read in conjunction with the financial statements and notes thereto. The operating results for any quarter are not necessarily indicative of results for any future period. Quarterly data presented may not reconcile to totals or full year results due to rounding.

2004

| | | 200 | 00 | | _ | 01 | | |
|----------------------------|---|----------------------|---------------------|-----------------|-----------------|-----------------|---------------------|-----------------|
| | First <u>Qtr</u> | Second <u>Qtr</u> | Third <u>Qtr</u> | Fourth Qtr | First Qtr | Second Qtr | Third <u>Qtr</u> | Fourth Qtr |
| | (Amounts in thousands, except per share data) | | | | | | | |
| Total revenues | \$11,279 | \$11,524 | \$10,536 | \$10,665 | \$13,567 | \$13,121 | \$11,892 | \$11,420 |
| Cost of product sales | 3,302 | 3,475 | 3,579 | 3,222 | 3,903 | 3,731 | 3,597 | 3,410 |
| Gross profit | <u> </u> | 8,049 | 6,957 | 7,443 | 9,664 | 9,390 | 8,295 | 8,010 |
| Selling, | 1,911 | 0,049 | 0,937 | 7,443 | 9,004 | 9,390 | 0,293 | 0,010 |
| general and | | 1,642 | 1,678 | | | | | |
| administrative | 1,821 | , | , | 1,731 | 2,586 | 2,487 | 2,678 | 2,697 |
| Research and | | | | | | | | |
| development | 348 | 571 | 596 | 593 | 822 | 723 | 506 | 620 |
| Other income | 414 | 419 | 5,904 | <u>516</u> | <u>474</u> | 389 | 330 | <u>215</u> |
| Net earnings before income | | | | | | | | |
| Taxes | 6,222 | 6,255 | 10,587 | 5,635 | 6,730 | 6,569 | 5,441 | 4,908 |
| Income tax expense | 228 | 2,155 | 3,777 | 1,859 | 2,375 | 2,356 | 2,009 | 1,774 |
| | | | | | | | | |
| Net earnings | <u>\$ 3,994</u> | <u>\$ 4,100</u> | <u>\$ 6,810</u> | <u>\$ 3,776</u> | <u>\$ 4,355</u> | <u>\$ 4,213</u> | <u>\$ 3,432</u> | <u>\$ 3,134</u> |
| Earnings per common | | | | | | | | |
| share: Basic | \$0.14 | \$0.14 | \$0.23 | \$0.13 | \$0.15 | \$0.14 | \$0.12 | \$0.11 |
| Diluted | \$0.14 | \$0.14 | | \$0.13 | \$0.15 | \$0.14 | \$0.12 | \$0.11 |
| Weighted average | \$0.13 | \$0.14 | \$0.23 | \$0.13 | \$0.13 | \$0.14 | \$0.11 | \$0.10 |
| shares | | | | | | | | |
| outstanding: | | | | | | | | |
| Basic: | 29,521 | 29,527 | 29,531 | 29,557 | 29,583 | 29,611 | 29,646 | 29,666 |
| Diluted | 30,267 | 30,021 | 29,903 | 29,808 | 29,879 | 30,033 | 30,185 | 30,112 |
| | | | | | | | | |

Inflation

Management does not believe that the relatively moderate levels of inflation which have been experienced in the United States in recent years have had a significant effect on the Company's net sales or profitability.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The Company's market risk exposure related to market risk sensitive financial instruments is not material. As of December 31, 2001, there were no outstanding borrowings under the Company's Unsecured Credit Agreement.

Item 8. Financial Statements and Supplementary Data

See Index to Financial Statements (Page 43) and following pages.

Item 9. Changes in and Disagreements on Accounting and

Financial Disclosure

Not Applicable

PART III

- Item 10. Directors and Officers of Registrant*
- **Item 11. Executive Compensation***
- Item 12. Security Ownership of Certain Beneficial Owners and Management*

Item 13. Certain Relationships and Related Transactions*

PART IV

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K.

a) The following documents are filed as part of this Report.

1. Financial Statements

See index to financial statements on page 43

2. Financial Schedules

See the index to financial schedules on page 43

^{*}The information called for by Items 10, 11, 12 and 13 is omitted from this Report and is incorporated by reference to the definitive Proxy Statement to be filed by the Company not later than 120 days after December 31, 2001, the close of its fiscal year.

3. Exhibits

| 3.1 - | Certificate of Incorporation as amended through July 29, 1998, (incorporated by reference to Exhibit 3.1 of the Company's report on Form 10-Q for the quarterly period ended June 30, 1998) |
|--------------|---|
| 3.2 - | By-Laws, (incorporated by reference to Exhibit 3.4 of the Company's registration statement on Form S-1, File No. 33-7097, and post-effective amendments thereto) |
| 4.1 - | See Exhibits 3.1 - 3.2 for provisions in |
| | the Company's Certificate of Incorporation |
| | and By-Laws defining the rights of holders |
| | of the Company's Common Stock. |
| 10.1 - | License Agreement with University of |
| | Missouri, as amended, (incorporated by reference to Exhibit 10.3 of |
| | the Company's registration statement on Form S-1, File No. 33-7097, |
| | and post-effective amendments thereto) |
| 10.2 - | Reassignment and Release Agreement among the Company |
| | John L. Russell, Jr., and Georgia Tech Research Institute, |
| | (incorporated by reference to Exhibit 10.8 of the Company's |
| | registration statement on Form S-1, File No. 33-7097, and post- |
| 10.2 | effective amendments thereto) |
| 10.3 - | 1986 Incentive and Non-Incentive Stock |
| | Option Plan*, (incorporated by reference to Exhibit 10.11 of the |
| | Company's registration statement on Form S-1, File No. 33-7097, and post-effective amendments thereto) |
| 10.4 - | 1990 Incentive and Non-Incentive Stock |
| 10.4 - | Option Plan*, (incorporated by reference to Exhibit 10.10 of the |
| | Company's report on Form 10-K for the year ended December 31, |
| | 1990) |
| 10.5 - | Agreement with Nordion International Inc., |
| 10.0 | (incorporated by reference to the Company's report on Form 8-K |
| | dated March 23, 1995) |
| 10.6 - | Rights Agreement dated as of February 17, 1997 between the |
| | Company and SunTrust Bank, Atlanta, (incorporated by reference to |
| | Exhibit 99.1 of the Company's registration statement on Form 8-A |
| | filed February 27, 1997) |
| 10.7 - | Theragenics Corporation 1995 Stock Option Plan*, (incorporated by |
| | reference to Exhibit 10.1 of the Company's common stock |
| | registration statement on Form S-8, file no. 333-15313) |
| 10.8 - | 1997 Stock Incentive Plan, (incorporated by reference to appendix B |
| | of the Company's Proxy Statement for its 1997 Annual Meeting of |
| | Stockholders filed on Schedule 14A)* |
| 10.9 - | Marketing and Sales Agreement by and between the Company |
| | and Indigo Medical, Inc. dated May 30, 1997 (incorporated by |
| | reference to Exhibit 10 of the Company's report on Form 10-Q for the |
| 10.10 | quarterly period ended September 30, 1997) |
| 10.10 - | Theragenics Corporation® Employee Stock Purchase Plan*, |
| | (incorporated by reference to appendix A of the Company's Proxy |
| | Statement for its 1998 Annual Meeting of Stockholders filed on |
| 10 11 - | Schedule 14A) Employment agreement of Bruce W. Smith* (incorporated by |
| 11/1 1 - | Camboviden Aviechen of Dince W. Allini: Uncolbiolated DV |

- reference to Exhibit 10.22 of the Company's report on Form 10-K for the year ended December 31, 1998)
- 10.12 Sublease dated March 25, 1999 between Theragenics Corporation® and Community Reuse Organization of East Tennessee, (incorporated by reference to Exhibit 10.1 of the Company's report on Form 10-Q for the quarterly period ended March 31, 1999)
- 10.13 Work for Others Agreement dated March 25, 1999 between Theragenics Corporation® and Lockheed Martin Energy Research Corporation, (incorporated by reference to Exhibit 10.2 of the Company's report on Form 10-Q for the quarterly period ended March 31, 1999)
- 10.14 Credit Agreement between Theragenics Corporation® and Wachovia Bank, National Association, (incorporated by reference to Exhibit 10.1 of the Company's report on Form 10-Q for the quarterly period ended September 30, 1999)
- 10.15 Theragenics Corporation® 2000 Stock Incentive Plan* (incorporated by reference to Exhibit 10.16 of the Company's report on Form 10-K for the year ended December 31, 1999)
- 10.16 Employment Agreement of M. Christine Jacobs* (incorporated by reference to Exhibit 10.1 of the Company's report on Form 10-Q for the quarterly period ended March 31, 2000)
- 24.1 Consent of Independent Public Accountants for Incorporation by Reference of Audit Report into Registration Statements
- 27.1 Financial Data Schedule for the years ended December 31, 2000 and 1999 (for SEC use only)

(b) Reports on Form 8-K

No reports on Form 8-K were filed by the Company during the last quarter of the most recent fiscal year.

^{*} Management contract or compensatory plan or arrangement identified pursuant to Item 14(a)(3) of Form 10-K

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

THERAGENICS CORPORATION

(Registrant)

By:/s/ M. Christine Jacobs
M. Christine Jacobs
Chief Executive Officer

Dated: March 27, 2002 Buford, Georgia

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

| Name | Title | Date |
|---|--|---------|
| /s/ M. Christine Jacobs M. Christine Jacobs | Chief Executive Officer (Principal Executive Officer); President Director, Chairman | 3/28/02 |
| /s/ Bruce W. Smith Bruce W. Smith | Chief Financial Officer, Treasurer (Principal Financial and Accounting Officer) and Secretary | 3/28/02 |
| /s/ Otis W. Brawley, M.D. Otis W. Brawley | Director | 3/28/02 |
| /s/ Orwin L. Carter, Ph.D. Orwin L. Carter | Director | 3/28/02 |
| /s/ Earnest W. Deavenport, Jr. Earnest W. Deavenport, Jr. | Director | 3/28/02 |

| /s/ Patrick L. Flinn Patrick L. Flinn | Director | 3/28/02 |
|---|----------|---------|
| /s/ John V. Herndon John V. Herndon | Director | 3/28/02 |
| /s/ Philip A. Incarnati Philip A. Incarnati | Director | 3/28/02 |
| /s/ Peter A.A. Saunders, F.R.S.A. Peter A.A. Saunders | Director | 3/28/02 |

THERAGENICS CORPORATION®

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Report of Independent Certified Public Accountants

Board of Directors Theragenics Corporation®

We have audited the balance sheets of Theragenics Corporation® (a Delaware corporation) as of December 31, 2000 and 2001, and the related statements of earnings, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Theragenics Corporation® as of December 31, 2000 and 2001, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States of America.

/s/ GRANT THORNTON LLP GRANT THORNTON LLP

Atlanta, Georgia January 11, 2002

BALANCE SHEETS

December 31,

(Amounts in thousands)

ASSETS

| | _ | 2000 | 2001 | |
|--|----|---------|------|---------|
| CURRENT ASSETS | | | | |
| Cash and short-term investments | \$ | 29,722 | \$ | 45,373 |
| Marketable securities | | 15,459 | | 10,852 |
| Trade accounts receivable, less allowance of | | | | |
| \$21 in 2000 and \$300 in 2001 | | 6,976 | | 7,220 |
| Inventories | | 1,324 | | 1,590 |
| Deferred income tax asset | | 355 | | 582 |
| Prepaid expenses and other current assets | _ | 1,004 | _ | 1,289 |
| Total current assets | | 54,840 | | 66,906 |
| PROPERTY, PLANT AND EQUIPMENT - AT COST | | | | |
| Buildings and improvements | | 26,156 | | 26,567 |
| Machinery and equipment | | 45,552 | | 45,904 |
| Office furniture and equipment | | 618 | | 673 |
| | | 72,326 | | 73,144 |
| Less accumulated depreciation | | 15,972 | | 21,479 |
| | | 56,354 | | 51,665 |
| Land and improvements | | 832 | | 834 |
| Construction in progress | | 18,446 | | 24,331 |
| | | 75,632 | | 76,830 |
| OTHER ASSETS | _ | 228 | | 271 |
| | \$ | 130,700 | \$ | 144,007 |

The accompanying notes are an integral part of these statements.

LIABILITIES AND SHAREHOLDERS' EQUITY

| | 2000 | _ | 2001 |
|---|---------------|----|---------|
| CURRENT LIABILITIES | | | |
| Accounts payable | | | |
| Trade | \$ 977 | \$ | 796 |
| Construction | 356 | | - |
| Accrued salaries, wages and payroll taxes | 488 | | 554 |
| Income taxes payable | 2,866 | | - |
| Other current liabilities | 301 | _ | 241 |
| Total current liabilities | 4,988 | | 1,591 |
| DEFERRED INCOME TAXES | 5,475 | | 6,337 |
| OTHER LIABILITIES | 74 | | 72 |
| COMMITMENTS AND CONTINGENCIES | - | | - |
| SHAREHOLDERS' EQUITY | | | |
| Common stock - authorized 100,000 shares | | | |
| of \$.01 par value; issued and outstanding, | | | |
| 29,579 in 2000 and 29,690 in 2001 | 296 | | 297 |
| Additional paid-in capital | 60,005 | | 60,714 |
| Retained earnings | 59,862 | | 74,996 |
| | 120,163 | _ | 136,007 |
| | | | |
| | \$ 130,700 | \$ | 144,007 |

STATEMENTS OF EARNINGS

Year ended December 31,

(Amounts in thousands, except per share data)

| | 1999 | 2000 | 2001 |
|--|------------------------------|-----------------------------|---------------------------------|
| Revenue Product sales Licensing fees | \$ 43,618 | \$ 43,898 106 44,004 | \$ 49,667 333 50,000 |
| Cost of sales | 13,293 | 13,578 | 14,641 |
| Gross profit | 30,425 | 30,426 | 35,359 |
| Operating expenses Selling, general and administrative Research and development | 6,300 709 7,009 | 6,872 2,108 8,980 | 10,448 2,671 13,119 |
| Earnings from operations | 23,416 | 21,446 | 22,240 |
| Other income (expense) Minimum income Interest income Interest and financing costs Other | 1,316 (93) 50 1,273 | 5,444 1,942 (133) | 1,639 (168) (63) 1,408 |
| Net earnings before income taxes | 24,689 | 28,699 | 23,648 |
| Income tax expense | 8,677 | 10,019 | 8,514 |
| Net earnings | \$ <u>16,012</u> | \$ <u>18,680</u> | \$ <u>15,134</u> |
| Net earnings per common share Basic | \$ <u>.54</u> | \$ <u>.63</u> | \$ <u>.51</u> |
| Diluted | \$ <u>.53</u> | \$ <u>.62</u> | \$ <u>.50</u> |

The accompanying notes are an integral part of these statements.

STATEMENTS OF SHAREHOLDERS' EQUITY

For the three years ended December 31, 2001

(Amounts in thousands, except per share data)

| | Common stock | | Additional | | | | | | | |
|---|------------------|----|--------------------|----|----------|----|-------------------|---------|-------|--|
| | Number of shares | | Par value \$.01 | | 1 | | Retained earnings | | Total | |
| Balance, December 31, 1998 | 29,406 | \$ | 294 | \$ | 58,921 | \$ | 25,170 \$ | 84,385 | | |
| Exercise of stock options and warrants | 97 | | 1 | | 322 | | - | 323 | | |
| Common stock issued under employee stock purchase plan | 11 | | - | | 73 | | - | 73 | | |
| Stock based compensation | - | | - | | 276 | | - | 276 | | |
| Income tax benefit from stock options and stock purchase plan | - | | - | | 8 | | - | 8 | | |
| Net earnings for the year | | | | | <u>-</u> | _ | 16,012 | 16,012 | | |
| Balance, December 31, 1999 | 29,514 | | 295 | | 59,600 | | 41,182 | 101,077 | | |
| Exercise of stock options, net of 44 shares redeemed | 52 | | 1 | | 35 | | - | 36 | | |
| Common stock issued under employee stock purchase plan | 13 | | - | | 85 | | - | 85 | | |
| Stock-based compensation | - | | - | | 189 | | - | 189 | | |

STATEMENTS OF SHAREHOLDERS' EQUITY - CONTINUED

For the three years ended December 31, 2001

(Amounts in thousands, except per share data)

| | Common stock | | Additional | | |
|---|------------------|--------------------|---------------------------|-------------------|-------------------|
| | Number of shares | Par value \$.01 | paid-in <u>capital</u> | Retained earnings | Total |
| | Bildres | Ψ.01 | <u> capitai</u> | <u> </u> | Total |
| Income tax benefit from stock options and stock purchase plan | - | - | 96 | - | 96 |
| Net earnings for the year | | | | 18,680 | 18,680 |
| Balance, December 31, 2000 | 29,579 | \$ 296 | \$ 60,005 | \$ 59,862 | \$ 120,163 |
| | | | | | |
| Exercise of stock options | 99 | 1 | 292 | - | 293 |
| Common stock issued under employee stock purchase plan | 12 | - | 69 | - | 69 |
| Stock-based compensation | - | - | 123 | - | 123 |
| Income tax benefit from stock options and stock purchase plan | - | - | 225 | - | 225 |
| Net earnings for the year | | - | _ | 15,134 | 15,134 |
| Balance, December 31, 2001 | 29,690 | \$ <u>297</u> | \$60,714 | \$74,996 | \$ <u>136,007</u> |

The accompanying notes are an integral part of these statements.

STATEMENTS OF CASH FLOWS

Year ended December 31,

(Amounts in thousands)

| | 1999 | <u> </u> | 2000 | | 2001 | <u>—</u> |
|---|------|----------|------|----------|-------|----------|
| Cash flows from operating activities: | | | | | | |
| Net earnings | \$ | 16,012 | \$ | 18,680 | \$ | 15,134 |
| Adjustments to reconcile net earnings to net | | • | | | | • |
| cash provided by operating activities: | | | | | | |
| Depreciation and amortization | | 3,887 | | 5,464 | | 5,721 |
| Deferred income taxes | | 1,468 | | 1,652 | | 635 |
| Income tax benefit from stock options | | 8 | | 96 | | 225 |
| Stock-based compensation | | 276 | | 189 | | 123 |
| Deferred rent | | 78 | | (4) | | (2) |
| Provision for allowances | | 263 | | (341) | | 527 |
| Loss on disposal of equipment | | 4 | | _ | | 52 |
| Change in assets and liabilities: | | | | | | |
| Accounts receivable | | (322) | 379 | | (523) | |
| Inventories | | (665) | | 167 | | (514) |
| Prepaid expenses and other current assets | | (384) | | (41) | | (285) |
| Other assets | | _ | | (115) | | (90) |
| Accounts payable | | 155 | | 194 | | (181) |
| Accrued salaries, wages and payroll taxes | | (166) | | 155 | | 66 |
| Income taxes payable | | 688 | | 2,303 | | (2,866) |
| Other current liabilities | _ | 149 | | (165) | | (60) |
| Net cash provided by operating activities | _ | 21,451 | | 28,613 | | 17,962 |
| Cash flows from investing activities: | | | | | | |
| Purchase and construction of property and equipme | ent | (14,129) | | (17,334) | | (7,354) |
| Purchase of marketable securities | | (11,985) | | (10,013) | | (14,823) |
| Maturities of marketable securities | - | 3,600 | | 9,570 | | 19,504 |
| Net cash used by investing activities | _ | (22,514) | | (17,777) | | (2,673) |

STATEMENTS OF CASH FLOWS - CONTINUED

Year ended December 31,

(Amounts in thousands)

| | _1 | 999 | 2000 | 2001 |
|--|----|--------------|--------------|--------------|
| Cash flows from financing activities: Proceeds from exercise of stock options, warrants and stock purchase plan Financing fees | | 396 (110) | 121 | 362 |
| Net cash provided by financing activities | | 286 | 121 | 362 |
| Net increase (decrease) in cash and short-term investments | | (777) | 10,957 | 15,651 |
| Cash and short-term investments at beginning of year | | 19,542 | 18,765 | 29,722 |
| Cash and short-term investments at end of year | \$ | 18,765 | \$ 29,722 | \$ 45,373 |
| Supplementary Cash Flow Disclosure | | | | |
| Interest paid, net of amounts capitalized | \$ | 93 | \$ 133 | \$ 168 |
| Income taxes paid | \$ | 6,513 | \$ 6,158 | \$ 10,971 |

The accompanying notes are an integral part of these statements.

NOTES TO FINANCIAL STATEMENTS

December 31, 2000 and 2001

NOTE A - ORGANIZATION AND DESCRIPTION OF BUSINESS

Theragenics Corporation® (the "Company") is the manufacturer of TheraSeed®, an implantable radiation device used primarily in the treatment of prostate cancer. TheraSeed® is a U.S. Food and Drug Administration (FDA) licensed device based on Palladium 103 (Pd-103), a radioactive isotope. Since August 10, 2000, the Company has sold its TheraSeed® implants directly to health care providers and to third party distributors. All TheraSeed® implants for the treatment of prostate cancer were sold through an exclusive distributor from May 1997 to August 10, 2000, when the exclusive distribution arrangement was terminated (see Note D). Physicians, hospitals and other healthcare providers, located primarily in the United States, utilize the TheraSeed® product.

The Company competes in a market characterized by rapid technological innovation, significant research efforts and continual scientific discoveries. This market is also subject to significant regulatory oversight at the federal, state and local levels. The regulatory bodies include, among others, the FDA, the Nuclear Regulatory Commission, various states' agencies such as the Departments of Natural and Human Resources, and the Occupational and Health Safety Administration, as well as the European counterparts of these U.S. governmental units. The Company is therefore directly affected by changes in technology and products, as they may apply to cancer treatment, governmental regulations related to its industry and the well being of the healthcare industry.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A summary of the significant accounting policies consistently applied in the preparation of the accompanying financial statements follows:

1. Use of Estimates

In preparing financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP), management is required to make certain estimates and assumptions that affect the reported amounts in the financial statements and accompanying notes. Actual results could differ from those estimates and assumptions.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

2. Revenue Recognition

Revenue from product sales is recognized upon shipment. Licensing fees are recognized in the period to which they relate.

3. Cash and Short-Term Investments

For purposes of reporting cash flows, cash and short-term investments include cash on hand, cash in banks and variable rate demand notes and commercial paper with original maturities of less than 90 days.

4. Marketable Securities

Marketable securities consist primarily of high-credit quality municipality obligations in accordance with the Company's investment policies. Marketable securities are classified as available for sale and are reported at fair value, based upon quoted market prices at the balance sheet date. The amortized cost of marketable securities approximated their fair value at both December 31, 2000 and 2001. The estimated fair value of marketable securities by contractual maturity at December 31, 2001, is as follows:

Due in one year or less \$8,792 Due after one year through five years 2,060

5. Inventories

Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out (FIFO) method. Inventories consist primarily of spare parts, components and work in process.

6. Property, Equipment, Depreciation and Amortization

Property and equipment are recorded at historical cost. Depreciation and amortization is provided for in amounts sufficient to relate the cost of depreciable assets to operations over their estimated services lives on a straight-line basis. Depreciation and amortization expense related to property and equipment charged to operations was approximately \$3,786,000, \$5,296,000 and \$5,748,000 for 1999, 2000 and 2001, respectively. Estimated services lives are 30 years for buildings and improvements, and 3 to 10 years for machinery, equipment and furniture.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

6. Property, Equipment, Depreciation and Amortization - Continued

A significant portion of the Company's depreciable assets is utilized in the production of its product. Management periodically evaluates the realizability of its depreciable assets in light of its current industry environment. Management believes that no impairment of depreciable assets exists at December 31, 2001. It is possible, however, that management's estimates concerning the realizability of the Company's depreciable assets could change in the near term due to changes in the technological and regulatory environment.

7. Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is provided for deferred tax assets when it is more likely than not that the asset will not be realized.

8. Research and Development Costs

Research and development (R&D) costs are expensed when incurred.

9. Advertising

The Company expenses the cost of advertising as incurred. Advertising expense was approximately \$513,000 for the year ended December 31, 2001. Advertising expense in each of the two years in the period ended December 31, 2000 was not significant.

10. Earnings Per Share and Common Stock

Basic net earnings per common share is based upon the weighted average number of common shares outstanding during the period. Diluted net earnings per common share is based upon the weighted average number of common shares outstanding plus dilutive potential common shares, including options and warrants outstanding during the period.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

11. Stock Based Compensation

Stock options issued to employees are accounted for under the intrinsic value method in which compensation expense is recognized for the amount, if any, that the fair value of the underlying common stock exceeds the exercise price at the date of grant. Stock options and other equity instruments issued in exchange for goods or services with non-employees are accounted for based on the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more readily measurable.

12. Fair Value of Financial Instruments

The Company's financial instruments include cash, cash equivalents and marketable securities. The carrying value of cash and cash equivalents approximates fair value due to the relatively short period to maturity of the instruments. Marketable securities are classified as available for sale and are reported at cost which approximates fair value.

NOTE C - CONSTRUCTION IN PROGRESS AND PURCHASE COMMITMENTS

The U.S. Department of Energy (DOE) has granted TheragenicsTM access to unique DOE technology for use in production of isotopes, including Pd-103. The Company has constructed a facility in Oak Ridge, Tennessee to house the equipment, infrastructure and work force necessary to support the production of isotopes, including Pd-103, using this DOE technology. The Company expects to invest approximately \$25 million to \$30 million to build this manufacturing and R&D facility. Construction costs of approximately \$24.1 million have been incurred on this project as of December 31, 2001, and are included in construction in progress.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE D - MARKETING AND SALES AGREEMENTS AND MAJOR CUSTOMERS

From May 1997 until August of 2000 substantially all TheraSeed® implants for the treatment of prostate cancer were sold through Indigo Medical, Inc. (Indigo) as an exclusive distributor under a Sales and Marketing Agreement between TheragenicsTM and Indigo (the "Agreement"). In August 2000 the Company billed Indigo \$5.4 million for shortfalls in its purchase minimum requirements under the Agreement, and Indigo gave notice of its intention to terminate the Agreement. The Company continued to sell TheraSeed® implants to Indigo on a non-exclusive basis from August 10, 2000 until January 5, 2001, when the Agreement was terminated. Currently, in addition to direct-to customer sales, TheragenicsTM has non-exclusive distribution agreements with four companies for the distribution of TheraSeed®. The five-year agreements give each distributor the right to distribute TheraSeed® in the U.S., Canada and Puerto Rico for the treatment of prostate cancer and other solid localized cancerous tumors. One of these non-exclusive agreements gives the distributor the option to distribute TheraSeed® internationally. A second of the four distributors also has the right, via a separate five-year agreement executed in March 2001, to distribute TheraSeed® internationally on a non-exclusive basis.

Sales to the four non-exclusive distributors represented approximately 66% of product revenue for the year ended December 31, 2001, with sales to three of the four non-exclusive distributors each exceeding 10% of total revenue for the year. Accounts receivable from the four non-exclusive distributors represented approximately 74% of accounts receivable at December 31, 2001, with each of the four non-exclusive distributors exceeding 10% of total accounts receivable.

As a result of the exclusive Sales and Marketing Agreement with Indigo, substantially all sales in the years ended December 31, 1999 and 2000, were to Indigo. Additionally, approximately 87% of accounts receivable were due from Indigo at December 31, 2000.

The \$5.4 million purchase minimum shortfall billing in August 2000, which was also received from Indigo in the third quarter of 2000, added approximately \$3.5 million or \$0.12 per diluted share to net earnings for the year ended December 31, 2000.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE E - INCOME TAXES

The income tax provision consisted of the following (in thousands):

| | 1999 | <u>1999</u> <u>2000</u> | |
|-------------------------------|-----------------------|--------------------------|--------------------------|
| Current: Federal State | \$ 6,926 | \$ 7,798 569 8,367 | \$ 7,305 574 7,879 |
| Deferred: Federal State | 1,334 134 1,468 | 1,513 139 1,652 | 583 52 635 |
| | \$8,677 | \$ <u>10,019</u> | \$ <u>8,514</u> |

The Company's temporary differences result in a deferred income tax liability at December 31, 2000 and 2001, summarized as follows (in thousands):

| | December 31, | | | | | | |
|---------------------------------------|--------------|---------|----|---------|--|--|--|
| | 20 | 2001 | | | | | |
| Deferred tax assets: | | | | | | | |
| Nondeductible accruals and allowances | \$ | 202 | \$ | 335 | | | |
| Inventories | | 177 | | 272 | | | |
| Stock compensation | | 232 | | 277 | | | |
| Gross deferred tax assets | | 611 | | 884 | | | |
| Deferred tax liabilities: | | | | | | | |
| Property and equipment | | (5,731) | | (6,639) | | | |
| Net deferred tax liability | \$ | (5,120) | \$ | (5,755) | | | |

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE E - INCOME TAXES - Continued

The net deferred tax liability is classified in the accompanying balance sheets as follows (in thousands):

| | | December 31, | | | |
|------------------------|----------------------------|------------------|----|---------|--|
| | | 2000 | 2 | 001 | |
| Current deferred tax a | sset | \$ 355 | \$ | 582 | |
| Long-term deferred to | x liability | (5,475) | | (6,337) | |
| | Net deferred tax liability | \$ (5,120) | \$ | (5,755) | |

A reconciliation of the statutory federal income tax rate and the effective tax rate follows:

| | <u> 1999</u> | 2000 | 2001 |
|--------------------------------------|---------------|---------------|---------------|
| | | • • • • • • | |
| Tax at applicable federal rates | 35.0% | 35.0% | 35.0% |
| State tax, net of federal income tax | 2.0 | 2.1 | 2.1 |
| Investment credits | (1.3) | (0.7) | (0.8) |
| Tax exempt interest | (0.8) | (1.6) | (0.5) |
| Other | <u>0.2</u> | 0.1 | <u>0.2</u> |
| | <u>35.1</u> % | <u>34.9</u> % | <u>36.0</u> % |

NOTE F - UNSECURED CREDIT AGREEMENT

The Company has an Unsecured Credit Agreement with a financial institution that expires in August 2003 and provides for borrowings of up to \$40.0 million under two lines of credit. Interest on outstanding borrowings is payable monthly at the prime rate or a LIBOR based rate, at the option of the Company. The LIBOR based rate is equal to LIBOR plus a margin ranging from .7% to 1.55%, depending upon certain financial ratios of the Company. An additional uncommitted \$10.0 million line of credit is also available under the Unsecured Credit Agreement, subject to the approval of the financial institution.

Provisions of the Unsecured Credit Agreement limit the incurrence of additional debt and require the maintenance of certain financial ratios, among other things. As of December 31, 2001, the Company was in compliance with the provisions of the Unsecured Credit Agreement and there were no outstanding borrowings.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE F - UNSECURED CREDIT AGREEMENT - Continued

The Company has letters of credit outstanding under the Unsecured Credit Agreement for approximately \$810,000. The significant portion of these letters of credit relate to potential future decommissioning activities. The letters of credit are subject to terms identical to those of borrowings under the Unsecured Credit Agreement.

NOTE G - COMMITMENTS AND CONTINGENCIES

Licensing Agreement

The Company holds a worldwide exclusive license from the University of Missouri for the use of technology, patented by the University, used in the Company's "TheraSphere®" product. The licensing agreement provides for the payment of royalties based on the level of sales and on lump sum payments received pursuant to a licensing agreement with Nordion International, Inc. (see below).

The Company has granted certain of its geographical rights under the licensing agreement with the University of Missouri to Nordion International, Inc., a Canadian company that is a producer, marketer and supplier of radioisotope products and related equipment. Under the Nordion agreement, the Company is entitled to licensing fee for each geographic area in which Nordion receives new drug approval. The Company will also be entitled to a percentage of future revenues earned by Nordion as royalties under the agreement. Royalties from this agreement are recorded as "Licensing fees" in the accompanying statements of earnings.

Lease Commitments

The Company leases land, space and office equipment under noncancelable leases that expire at various dates through April 2029. Approximate minimum lease payments under the leases are as follows: 2002, \$322,000; 2003, \$314,000; 2004, \$137,000; 2005, \$137,000; 2006, \$137,000; and \$3,048,000 thereafter.

Rent expense was approximately \$404,000, \$407,000 and \$385,000 for the years ended December 31, 1999, 2000 and 2001, respectively.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE G - COMMITMENTS AND CONTINGENCIES - Continued

Contingencies

In January 1999, the Company and certain of its officers and directors were named as defendants in certain securities actions alleging violations of the federal securities laws, including Sections 10(b), 20(a) and Rule 10b-5 of the Securities and Exchange Act of 1934, as amended. These actions have been consolidated into a single action pending in the U.S. District Court for the Northern District of Georgia. The complaint, as amended, purports to represent a class of investors who purchased or sold securities during the time period from January 29, 1998 to January 11, 1999. The amended complaint generally alleges that the defendants made certain misrepresentations and omissions in connection with the performance of the Company during the class period and seeks unspecified damages. On May 14, 1999 a stockholder of the Company filed a derivative complaint in the Delaware Court of Chancery purportedly on behalf of the Company, alleging that certain directors breached their fiduciary duties by engaging in the conduct that is alleged in the consolidated federal class action complaint. The derivative action has been stayed by the agreement of the parties. On July 19, 2000, the Court granted the Company's motion to dismiss the consolidated federal class action complaint for failure to state a claim against the Company, and granted the plaintiffs leave to amend their complaint. On August 21, 2000, the plaintiffs filed a second amended complaint and on March 30, 2001, the Court denied the defendants' motion to dismiss the plaintiff's second amended complaint. The Court also denied the Company's motion for reconsideration, and discovery is underway. Management believes these charges are without merit and intends to vigorously oppose the litigation, however, given the nature and early stage of the proceedings, the ultimate outcome of the litigation cannot be determined at this time. Accordingly, no provision for any liability that might result from this litigation has been made. The Company maintains insurance for claims of this general nature.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE H - STOCK OPTIONS AND WARRANTS Stock Options

The Company's Board of Directors has approved four stock option plans which in aggregate cover up to 5,000,000 shares of common stock. The plans provide for the expiration of options ten years from the date of grant and requires the exercise price of the options granted to be at least equal to 100% of market value on the date granted. Stock options become exercisable over a two to five year vesting period.

Stock option transactions for each of the three years in the period ended December 31, 2001, are summarized below (shares in thousands):

| | 1999 | | 20 | 2000 | | 001 |
|--------------------------------|---------------|--------------|---------------|--------------|---------------|--------------|
| | | Weighted | | Weighted | | Weighted |
| | | Average | | Average | | Average |
| | | Exercise | | Exercise | | exercise |
| | <u>Shares</u> | <u>price</u> | <u>Shares</u> | <u>price</u> | <u>Shares</u> | <u>price</u> |
| Outstanding, beginning of year | 1,764 | \$ 10.37 | 2,291 | \$10.10 | 2,311 | \$ 10.00 |
| Granted | 564 | 8.77 | 176 | 7.66 | 112 | 7.96 |
| Exercised | (37) | 2.64 | (96) | 2.69 | (99) | 2.98 |
| Forfeited | - | - | (60) | 18.50 | - | - |
| Outstanding, end of year | 2,291 | \$ 10.10 | 2,311 | \$10.00 | 2,324 | \$ 10.21 |

The following table summarizes information about stock options outstanding at December 31, 2001 (shares in thousands):

| | 0 | ptions outstar | nding | <u>Options</u> | exercisable |
|------------------|----------------|---------------------|-----------------|------------------|-----------------|
| | | Weighted | d | | |
| | | average | Weighted | | |
| Range of | Number | Averag | ge number | Average | Weighted |
| excise | outstanding a | at Contractu | al exercise | exercisable at | Exercise |
| price | December 31, 2 | 001 Life (Ye | ars) price | December 31, 200 | 01 price |
| | | | | | |
| \$1.63 - \$5.38 | 3 41 | 4 3.2 | \$2.76 | 400 | \$2.67 |
| \$6.88 - \$11. | 75 1,29 | 6.4 | 8.45 | 823 | 8.48 |
| \$16.56 - \$26.0 | 63 <u>61</u> | <u>7</u> <u>6.2</u> | <u>18.90</u> | <u>485</u> | <u>19.11</u> |
| | | | | | |
| | <u>2,32</u> | <u>6.1</u> | \$ <u>10.21</u> | <u>1,708</u> | \$ <u>10.14</u> |

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE H - STOCK OPTIONS AND WARRANTS - Continued

Stock Options - Continued

The Company follows the practice of recording amounts received upon the exercise of certain options by crediting common stock and additional paid-in capital. No charges are reflected in the statements of earnings as a result of the grant or exercise of options to or by employees. The Company realizes an income tax benefit from the exercise of certain stock options and the exercise and early disposition of the shares acquired via certain other stock options. This benefit results in a reduction to income taxes payable and an increase to additional paid-in capital.

The Company uses the intrinsic value method in accounting for stock options issued to employees. In applying this method, no compensation cost has been recognized. Had compensation cost for the Company's stock option plans been determined based on the fair value at the grant dates for awards under those plans, the Company's net earnings and earnings per share would have resulted in the proforma amounts indicated below (in thousands, except per share data):

| | | | 1999 | 2000 | | 2001 | |
|---------------------------------------|--------------------------|----|------------------|------------------------|----|------------------|--|
| Net earnings | As reported Pro forma | \$ | 16,012 14,122 | \$ 18,680 16,612 | \$ | 15,134 13,749 | |
| Basic net earnings per common share | As reported Pro forma | \$ | .54 .47 | \$.63 .57 | \$ | .51 .47 | |
| Diluted net earnings per common share | As reported Pro forma | \$ | .53 .46 | \$.62 .56 | \$ | .50 .46 | |

The weighted average fair value of the options granted during 1999, 2000 and 2001 was \$6.37, \$5.06 and \$5.84, respectively. The fair values were estimated using the Black Scholes options-pricing model with the following weighted average assumptions:

| | 1999 | 2000 | 2001 |
|---------------------------------|-------|-------|-------|
| | | | |
| Expected dividend yield | 0.0% | 0.0% | 0.0% |
| Expected stock price volatility | 77.3% | 79.7% | 79.8% |
| Risk-free interest rate | 6.2% | 5.4% | 5.3% |
| Expected life of option (years) | 6.3 | 5.0 | 6.3 |

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE H - STOCK OPTIONS AND WARRANTS - Continued

Stock Options Issued to Non-Employees

During 1998, the Company issued 100,000 stock options to an individual for medical and cancer consulting services. The Company is recording consulting expenses based on the estimated fair value of the options at the grant date over the consulting term of five years. Consulting expenses related to this agreement were approximately \$276,000, \$189,000 and \$123,000 during 1999, 2000 and 2001, respectively.

Warrants

60,000 warrants were exercised during 1999, resulting in proceeds to the Company of \$225,000. No unexercised warrants were outstanding as of December 31, 2001.

NOTE I - EARNINGS PER SHARE

Earnings per common share was computed as follows (in thousands, except per share data):

| | Year | Year ended December 31, | | | | | |
|--|------------------|-------------------------|------------------|--|--|--|--|
| | 1999 | 2000 | 2001 | | | | |
| Numerator for basic and diluted earnings per share – income available common shareholders | \$ <u>16,012</u> | \$ <u>18,680</u> | \$ <u>15,134</u> | | | | |
| Denominator for basic earnings per share – weighted average shares Effect of dilutive stock options and warrants | 29,478 482 | 29,534 428 | 29,627 402 | | | | |
| Denominator for diluted earnings per share – adjusted weighted average shares | 29,960 | 29,962 | 30,029 | | | | |
| Basic earnings per share | \$ <u>.54</u> | \$ <u>.63</u> | \$ <u>.51</u> | | | | |
| Diluted earnings per share | \$ <u>.53</u> | \$ <u>.62</u> | \$ <u>.50</u> | | | | |

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001

NOTE J - EMPLOYEE BENEFIT PLAN

401(k) Savings Plan

The Company has a 401(k) savings plan providing retirement benefits to all employees at least 21 years of age. The Company makes matching contributions of 20%-60% of each participant's contribution, up to 6% of salary. The percentage of matching contributions are based on net earnings and are made in the form of Company common stock. Matching contributions are charged to operating expenses and totaled approximately \$69,000, \$48,000 and \$47,000 in 1999, 2000 and 2001, respectively.

Employee Stock Purchase Plan

The Theragenics Corporation® Employee Stock Purchase Plan (the "ESPP") allows eligible employees the right to purchase common stock on a quarterly basis at the lower of 85% of the market price at the beginning or end of each quarterly offering period. As of December 31, 2000 and 2001, there were 176,000 and 162,000 shares of common stock reserved for the ESPP, respectively, and 24,000 and 38,000 shares had been issued under the plan, respectively.

NOTE K - RELATED PARTY TRANSACTIONS

An officer and director of the Company is a director of the Atlanta Cardiovascular Research Institute (ACRI). ACRI performs animal studies related to the Company's research initiatives. TheragenicsTM paid ACRI approximately \$192,000, \$280,000, and \$320,000 during 1999, 2000, and 2001, respectively, for these animal studies.

The same officer and director is also a director of a vendor that provides radiation measurement services to TheragenicsTM. TheragenicsTM paid this vendor approximately \$27,000, \$22,000 and \$24,000, during 1999, 2000 and 2001 for these services.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001 (Amounts in thousands, except per share data)

NOTE L - QUARTERLY FINANCIAL DATA (UNAUDITED)

The following summarizes certain quarterly results of operations (in thousands, except per share data):

| | Quarters ended | | | | | | | |
|-------------------------------|----------------|--------|------|---------|---------|-----------|----------|----------|
| | Ma | rch 31 | Ju | ne 30 | Sept | tember 30 | Dec | ember 31 |
| Year ended December 31, 2001: | | _ | | | _ | | | |
| Net revenue | \$ 1 | 3,567 | \$ 1 | 3,121 | \$ | 11,892 | \$ | 11,420 |
| Gross profit | | 9,664 | | 9,390 | | 8,295 | | 8,010 |
| Net earnings | | 4,355 | | 4,213 | | 3,432 | | 3,134 |
| Net earnings per common share | | | | | | | | |
| Basic | \$ | .15 | \$ | .14 | \$ | .12 | \$ | .11 |
| Diluted | \$ | .15 | \$ | .14 | \$ | .11 | \$ | .10 |
| | | | | Quarter | s ended | | | |
| | Ma | rch 31 | | | | Dec | ember 31 | |
| Year ended December 31, 2000: | | | | | | | | |
| Net revenue | \$ 1 | 1,279 | \$ 1 | 1,524 | \$ | 10,536 | \$ | 10,665 |
| Gross profit | | 7,977 | | 8,049 | | 6,957 | | 7,443 |
| Net earnings | | 3,994 | | 4,100 | | 6,810 | | 3,776 |
| Net earnings per common share | | | | • | | | | |
| Basic | \$ | .14 | \$ | .14 | \$ | .23 | \$ | .13 |
| Diluted | \$ | .13 | \$ | .14 | \$ | .23 | \$ | .13 |

NOTE M – RECENTLY ISSUED ACCOUNTING STANDARD

In June 2001, the Financial Accounting Standards Board (FASB) issued Statement on Financial Accounting Standards (SFAS) No. 143, *Accounting for Asset Retirement Obligations*, which will be effective for the Company's 2003 fiscal year. SFAS No. 143 provides accounting requirements for the recognition and measurement of liabilities for obligations associated with the retirement of tangible long-lived assets resulting from the acquisition, construction, development, and operation of a long-lived asset. Under the standard, these liabilities will be recognized at fair value as incurred and capitalized as part of the cost of the related tangible long-lived asset. This additional asset cost will be amortized over the related asset's useful life. Accretion expense related to the liability due to the passage of time will also be recorded. SFAS No. 143 requires that expense amounts related to periods prior to adoption of SFAS No. 143 be recorded as a cumulative effect adjustment in the year of adoption.

NOTES TO FINANCIAL STATEMENTS - CONTINUED

December 31, 2000 and 2001 (Amounts in thousands, except per share data)

NOTE M - RECENTLY ISSUED ACCOUNTING STANDARD - continued

TheragenicsTM has identified retirement obligations associated with the decommissioning of its cyclotrons and related facilities. Management expects the adoption of SFAS No. 143 in 2003 will result in an increase to its liabilities of approximately \$625,000, and a cumulative effect expense of approximately \$310,000 before income taxes, and \$195,000 after income taxes. Annual amortization of the increased asset costs and accretion expense charged to operations is expected to be less than \$100,000 before income taxes and \$63,000 after income taxes.

Prior to the issuance of SFAS No. 143, the Company has been disclosing that it has been required to provide letters of credit for regulatory requirements (which represent future decommissioning activities) since the commencement of the related operations. This disclosure is found in Note F of these footnotes and in previous financial statements. The significant portion of the letters of credit referred to in Note F are required by the relevant governmental agency that regulates these aspects of the Company's activities.

Report of Independent Certified Public Accountants on Schedule

Board of Directors Theragenics Corporation®

In connection with our audit of the financial statements of Theragenics Corporation® referred to in our report dated January 11, 2002, which is included in the annual report to security holders and incorporated by reference in Part II of this form, we have also audited Schedule II for each of the three years in the period ended December 31, 2001. In our opinion, the schedule presents fairly, in all material respects, the information required to be set forth therein.

/s/ GRANT THORNTON LLP GRANT THORNTON LLP.

Atlanta, Georgia January 11, 2002

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

For each of the three years in the period ended December 31, 2001 (Amounts in thousands)

| Column A | Colu | ımn B | | Co | olumn | <u>C</u> | <u>Cc</u> | olumn D | | Column E |
|---|---------------|------------------------------|------------|-----------------|-----------------|-------------------------------------|------------------------|---------------|------------|-------------------------|
| | begini | ance at ning of period | Cha cos | (1) arged to | Cha other a | (2) rged to accounts cribe | | ctions - | en | ance at d of riod |
| Year ended December 31, 2001 Allowance for doubtful accounts receivable Allowance for doubtful inventory | \$ * \$ | 21 300 | \$ \$ | 279 248 | \$ \$ | - - | \$ \$ | - - | \$ \$ | 300 548 |
| Year ended December 31, 2000 Allowance for doubtful accounts receivable Allowance for doubtful inventory | \$ ' \$ | 43 619 | \$ \$ | - - | \$ \$ | - | \$ \$ | 22(a 319(l | | 21 300 |
| Year ended December 31, 1999 Allowance for doubtful accounts receivable Allowance for doubtful inventory | \$ \$ | 54 345 | \$ \$ | - 274 | \$ \$ | - - | \$ \$ | 11(a | a)\$ \$ | 43 619 |

⁽a) – adjustment to allowance(b) – disposal of inventory

THERAGENICS CORPORATION

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CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Board of Directors Theragenics Corporation

We hereby consent to the incorporation by reference of our reports dated January 11, 2002, appearing in your Annual Report on Form 10-K for the year ended December 31, 2001, in the Company's Registration Statements on Form S-8, file numbers 333-15313, 333-40737, 333-40653, and 333-64801 and 333-48136.

/s/ GRANT THORNTON LLP GRANT THORNTON

Atlanta, Georgia March 27, 2002